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THE EFFECTS ON HIGHWAY SAFETY OF RAISING THE MINIMUM LEGAL PURCHASING AGE FOR ALCOHOLIC BEVERAGES IN THE STATE OF MONTANA

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DEPARTMENT OF JUSTICE
HIGHWAY TRAFFIC SAFETY

TED SCHWINDEN, GOVERNOR
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This packet has been assembled to provide information about raising the legal minimum purchasing age for alcoholic beverages in the State of Montana.

As the material in this packet indicates, there is considerable difference of opinion as to the affect this change might have on traffic safety. Neither the national research or accident data from Montana has conclusive evidence that major traffic safety benefit could be gained by raising the minimum purchasing age alone. This may be true because actual consumption might change little in the affected age groups.

This is not to say that such a proposal might not have other long term societal benefit. The short and long term benefit to Montana, however, would only materialize if the frequency of drinking and driving were to change in the 19 and 20 year old age groups. Raising the purchase age is one matter, and raising the consumption age is quite another, and the first step may not yield the latter to any significant degree.

It is vitally important that the reader of this information be fully aware that many suppositions have been made throughout the studies. A definite lack of sound data on alcohol statistics exists for many of the years in all of the studies. Further complicating the issue is the fact that there are numerous factors such as vehicular miles traveled, demographic changes, weather conditions, high fuel prices, economic recessions, gas shortages, energy conservation and others. Any one or a combination of two or more could be cause to influence the conclusions drawn. It is apparent that none of these were taken into consideration. (See Section 6, Table #3.)

It is interesting to note that on Figure #2 of Section 2, Montana was the only state studied that showed an INCREASED net change in driver involvement in nighttime fatal crashes after changes in the legal minimum purchasing age. (This entire study was based only on nighttime fatal crashes between the hours of 9:00 p.m. and 5:59 a.m., not on alcohol-related crashes. Quoting from the study, "Alcohol is a major factor in fatal motor vehicle crashes in general, but is particularly likely to be involved in nighttime fatal crashes.") (emphasis added)

It would appear to be nearly impossible to draw hard line conclusions, either pro or con, on the basis of these studies or others written on the subject. Too little definitive data is currently available in Montana or elsewhere to support either side of the issue at this time, although public sentiment currently supports a change to the 21 year old purchasing age. (77% of all Americans according to a recent Gallup poll.)

There may be other methods of addressing the perceived problem in addition to, or possibly instead of, the change in purchase age. Some of these suggestions are contained in Section 8.

Albert E. Goke

Albert E. Goke
Administrator

AN EQUAL OPPORTUNITY EMPLOYER

publications & graphics

SECTION 1.

YOUTH AND ALCOHOL

If we examine the growing process of young people, it is apparent that adolescence is a time of pressure, demands, and many physical and emotional changes. Rapid growth and hormonal changes during puberty frequently cause mood swings and unpredictable demands for self-satisfaction and physical expression, often resulting in physiological confusion. During adolescence there is a tremendous desire for conformity with peers. They dress alike, wear the same hair styles, listen to the same music, and generally think alike.

Psychologists describe four stages that adolescents must pass through as they move toward maturity. The first is the acceptance of the biological role, which involves coming to terms with their sexual identity. During the next stage they struggle to become comfortable with heterosexuality. These years are fraught with insecurity and self-consciousness in dealing with the opposite sex.

The third step is the choice of an occupational identity, when teenagers begin to explore what they want to be. Indecision and soul-searching are a significant part of this process.

The fourth, and perhaps most important, stage is the struggle for independence. There is much conflict between the need to break away from parents and the desire to remain cared for. Rebellion is an expression of this conflict, an attempt to become independent while still living at home, being fed, and having to answer to parents.

Young people use many mental mechanisms to get them through this difficult period. Unfortunately, some find relief from pressures by using drugs or alcohol--alcohol is easy to obtain, legal, and often used by their parents--so it becomes the drug of choice for many.

There are many theories as to why teenage drinking is on the rise. Certainly the particular needs and conflicts of adolescence must be kept in mind. Some authorities also believe young people drink because of parental influence. Parents are role models for adult behavior, and through their attitudes and practices they play an important role in determining how their children will perceive alcohol in their lives.

Drinking has come to represent one of the "rites of passage" into the adult world. The consumption of alcohol at social events such as weddings, graduations, and funerals is commonplace in society today. This type of drinking by adolescents is actually a move toward adult patterns of behavior, not a rebellion against them.

Adolescents who drink alcohol and use drugs during this period of life are at high risk both emotionally and physically. Heavy use significantly slows down the emotional developmental process just described, thus stopping the necessary growth toward adulthood. Teens are also more vulnerable to chemical dependency, becoming physiologically habituated much more quickly than adults.

Years of experience in the field of alcohol and drug abuse prevention have shown us that effective programs must have the following elements:

(1) activities that promote alternatives to drinking and using drugs

(2) exercises that enhance self-esteem and give teens positive experiences

(3) activities that teach effective communication skills both among peers and between teens and parents.

SECTION 2.

THE EFFECT OF RAISING THE LEGAL MINIMUM DRINKING AGE ON INVOLVEMENT IN FATAL CRASHES

*ALLAN F. WILLIAMS, PAUL L. ZADOR, SANDRA S. HARRIS, and RONALD S. KARPF**

In the early 1970s, more than half of the states in the United States lowered their legal minimum ages—in most cases from twenty-one to eighteen—for the purchase of some or all alcoholic beverages. Research indicated that this legislation resulted in increased involvement of young drivers in crashes.[1] In a study of various states and Canadian provinces that reduced the drinking age from twenty-one to eighteen, significant increases were shown in fatal crashes—particularly in nighttime and single vehicle crashes in which alcohol is most often involved—involving drivers under twenty-one, compared with adjacent areas that did not reduce their drinking ages. These increases occurred not only among eighteen- to twenty-year-olds, who were directly affected by law changes, but also among fifteen- to seventeen-year-olds.[2]

As a result of these findings and other reports of growing problems related to teenage drivers and alcohol, many states that had lowered their legal minimum drinking ages in the early 1970s began in 1976 to raise them. By the end of 1980, fourteen of the thirty states that had lowered their drinking ages for the purchase of some or all alcoholic beverages had raised them, although not necessarily back to the original limits. In this paper, a study of the effect of raising the drinking age on fatal crashes involving teenage drivers is reported.

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*Dr. Williams is senior behavioral scientist, Dr. Zador is senior statistician, and Ms. Harris and Dr. Karpf are statisticians, Insurance Institute for Highway Safety, Washington, D.C.

[1] Allan F. Williams, Robert F. Rich, Paul L. Zador, & Leon S. Robertson, The Legal Minimum Drinking Age and Fatal Motor Vehicle Crashes, 4 J. Legal Stud. 219 (1975); Reginald G. Smart & Michael S. Goodstadt, Effects of Reducing the Legal Alcohol-Purchasing Age on Drinking and Drinking Related Problems: A Review of Empirical Studies, 38 J. Stud. Alcohol 1313 (1977).

[2] Williams et al., *supra* note 1.

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METHODS

Research Design

Nine states, all of which raised their legal minimum drinking ages between September 1, 1976 and January 1, 1980, were studied. Four states that raised their drinking ages during 1980 were excluded, because the law changes were too recent for their effects to be measured using data available when the study was conducted. New Jersey, which raised its drinking age from eighteen to nineteen on January 2, 1980 but included a "grandfather" clause permitting those already eighteen before that date to drink, was also excluded.

Each of the nine states was paired with a comparison state in which the legal minimum drinking age remained unchanged during the study period. Comparison states were chosen on the basis of geographic proximity to law-change states and comparability with law-change states with respect to numbers of crash fatalities. Table 1 shows the law-change and comparison state pairs and drinking age in each state.

Data on driver involvement in fatal crashes from January 1975 through September 1980 were obtained from the Fatal Accident Reporting System

TABLE 1

LEGAL MINIMUM DRINKING AGES IN LAW-CHANGE AND COMPARISON STATES*

Law-Change State	Drinking Age Change (From–To)	Effective Date	Comparison State	Legal Minimum Drinking Age
Illinois†	19–21	1/1/80	Indiana	21
Iowa‡	18–19	7/1/78	Kansas§	21
Maine	18–20	10/24/77	Vermont	18
Massachusetts	18–20	4/1/79	Connecticut	18
Michigan	18–21	12/23/78	Ohio§	21
Minnesota‡	18–19	9/1/76	Wisconsin	18
Montana	18–19	1/1/79	Idaho	19
New Hampshire	18–20	5/24/79	Part of New York‖	18
Tennessee	18–19	6/1/79	Kentucky	21

* The laws apply to all alcoholic beverages except where noted.

† The age change applied to beer and wine; the legal age for distilled spirits was twenty-one throughout the study period. Prior to the 1980 change, home-rule units in Illinois had the authority to promulgate different laws for drinking ages. Some raised the drinking age from nineteen to twenty-one for beer and wine before the statewide change in 1980, although in some cases, beer and wine purchase by nineteen- to twenty-year-olds was permitted under some conditions.

‡ A grandfather clause permitted eighteen-year-olds to drink if they were eighteen before the law went into effect.

§ The legal minimum drinking age was eighteen for beer with not over 3.2 percent alcohol content and twenty-one for other alcoholic beverages.

‖ The following counties in central and northern New York were included: Clinton, Essex, Franklin, Fulton, Hamilton, Herkimer, Jefferson, Lewis, Madison, Montgomery, Oneida, Oswego, St. Lawrence, Saratoga, Warren, and Washington.

(FARS).[3] Only drivers of motor vehicles—automobiles, light trucks, vans, on-off road vehicles—were included.

Alcohol is a major factor in fatal motor vehicle crashes in general, but is particularly likely to be involved in nighttime fatal crashes (9:00 P.M.–5:59 A.M.), especially single vehicle nighttime fatal crashes.[4] This subset of crashes therefore received special attention during the study.

The duration of postlaw periods studied ranged from nine months (Illinois) to three years (Minnesota). In two states that raised their drinking ages from eighteen to nineteen but had a grandfather clause that permitted those already eighteen years old to drink, the twelve-month period following the law change dates was excluded. Prelaw and postlaw periods for the nine states are shown in Figure 1. The ages to which the law changes apply are also given for each state in Figure 1.

Fatal crash involvement of drivers younger than those covered by the laws (starting with age fifteen) was also studied because of the possibility of spillover effects in these ages when alcoholic beverages could no longer be obtained legally by older teenagers. As a control, drivers older than those to whom the law changes applied (through age twenty-one), who could drink legally in law-change states throughout the study period, were also included.

When a state changes its drinking age, there are possible effects on fatal crash involvement in adjacent states, both in the age groups to which the law changes apply and among their younger and older associates. These effects can be positive or negative. For example, if a state raises its drinking age from eighteen to twenty-one, and a neighboring state has a drinking age of eighteen, then eighteen- to twenty-year-olds in the law-change state may travel to the neighboring state in order to drink legally and may have crashes there. On the other hand, if a neighboring state has a drinking age of twenty-one, eighteen- to twenty-year-olds in that state may no longer travel to the law-change state to drink and consequently may crash less in both states.

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[3] FARS is a computerized data base containing information on motor vehicle fatalities in The fifty states, the District of Columbia, and Puerto Rico. The data are collected by the state governments under contract to the National Highway Traffic Safety Administration. Police accident reports are the primary source of data, supplemented by data from medical examiners and other sources.

[4] Julian A. Waller, E. M. King, George Nielson, & Henry W. Turkel, Alcohol and Other Factors in California Highway Fatalities, in Proceedings of the Eleventh Annual Meeting of the American Association for Automotive Medicine (Charles C. Thomas ed. 1970); Nathan Rosenberg, Ronald H. Laessig, & Robert R. Rawlings, Alcohol, Age and Fatal Traffic Accidents, 35 J. Stud. Alcohol 473 (1974); Ralph K. Jones & Kent B. Joscelyn, Alcohol and Highway Safety 1978: A Review of the State of Knowledge (Nat'l Technical Information Service, for Nat'l Highway Traffic Safety Administration) (1978).

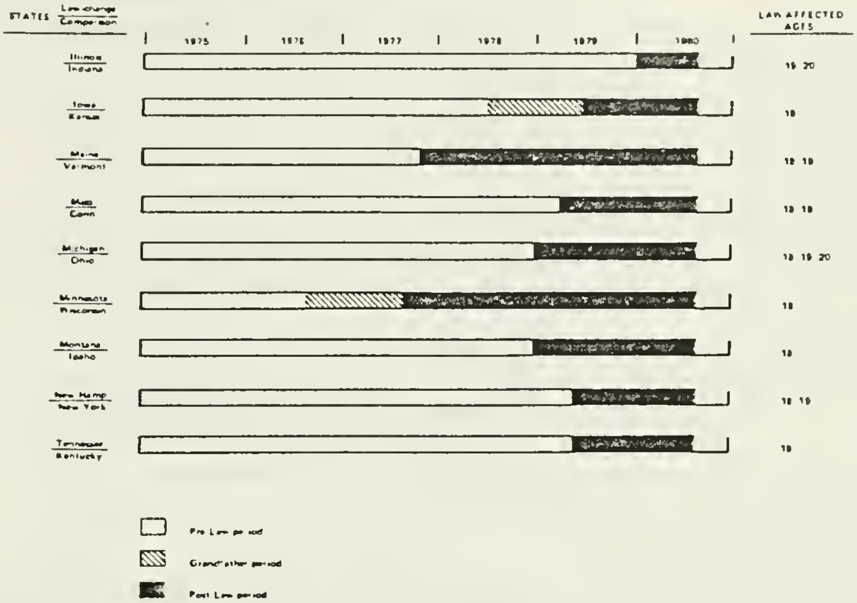

FIGURE 1.—Prelaw and postlaw periods studied and ages to which the law change applies. "Grandfather" clause in Minnesota/Wisconsin permitted eighteen-year-olds to drink if they were eighteen before the law went into effect.

These and other possible effects have a bearing on the research design used in the present study, which compares law-change states with neighboring (although not necessarily contiguous) states, and must also be considered in assessing the net effect of states raising their legal minimum drinking ages. It was found, however, that the number of drivers in the age groups studied with out-of-state licenses in fatal crashes, pre- and postlaw, was small—less than 10 percent of the total. More important, the number of drivers in fatal crashes in law-change states who were licensed in the comparison states (and in fatal crashes in comparison states who were licensed in the law-change states) was less than one percent of the total.

Analyses based only on drivers licensed in the state in which the crash occurred produced the same results as analyses based on all drivers; the latter measure was therefore used.

Statistical Analysis

If raising the drinking age reduces alcohol-related fatal crashes, nighttime fatal crashes would be expected to be reduced more than daytime crashes (and single-vehicle nighttime fatal crashes more than multiple-vehicle daytime fatal crashes). In other words, the ratio of night-to-day fatal crashes in a law-change state would be greater before the law change than after it. This can be shown as:

$$\frac{n_{11}}{n_{21}} \geqslant \frac{n_{12}}{n_{22}}, \tag{1}$$

and in the following two-by-two table:

	Time Period	
Time of Crash	Before Law Change	After Law Change
Night	n_{11}	n_{12}
Day	n_{21}	n_{22}

A statistical measure that compares such ratios is the log-odds ratio,[5] defined as:

$$\beta = \ln \frac{n_{12}/n_{22}}{n_{11}/n_{21}} \tag{2}$$

Positive values of β correspond to increases in the night-to-day ratio, negative values to decreases, and $\beta = 0$ whenever the ratio is unchanged. Except for small samples ($N \leqslant 5$) the distribution of β is asymptotically normal and its variance is approximately

$$\sigma^2_\beta = \frac{1}{n_{11}} + \frac{1}{n_{12}} + \frac{1}{n_{21}}, + \frac{1}{n_{22}}. \tag{3}$$

The hypothesis of no change in the night-to-day ratio after the law could therefore be tested in terms of the approximately standard normal test statistic $Z = \beta/\sigma_\beta$. Large negative values of Z would indicate a reduction in this ratio; large positive values an increase.

To rule out the possibility that changes in the ratios in law-change states were part of a regional trend, the log-odds ratio for a law-change state (β_l) was compared with the log-odds ratio of the non-law-change (comparison) state with which it was paired (β_c). To calculate β_c data for the comparison state were split into before and after periods that coincided with these periods in the law-change state. Positive, zero, or negative values of the difference $\Delta\beta = \beta_l - \beta_c$ are indicative of greater, equal, or smaller increases in the law-change state than in the comparison state. The variance of this test statistic is $\sigma^2_{\Delta\beta} = \sigma^2_{\beta_l} + \sigma^2_{\beta_c}$ and $\Delta\beta/\sigma_{\Delta\beta}$ is again standard normal if the change in the night-to-day ratio was the same in both states.

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[5] D. R. Cox, Analysis of Binary Data (1970).

To rule out the possibility that changes observed in age groups covered by the law (and in younger groups) were part of a trend in the night-to-day ratio that occurred in other age groups in law change states, log-odds ratios in law-change and comparison states were compared for older drivers, through age twenty-one, to whom the law change did not apply. This was done by comparing $\Delta\beta_a$ for the law-affected group to a similarly calculated $\Delta\beta_o$ for the older age group. As before, the variance of $\Delta\beta_a - \Delta\beta_o$ is equal to $\sigma^2_{\Delta\beta_o} + \sigma^2_{\Delta\beta_a}$ and the test statistic is $(\Delta\beta_a - \Delta\beta_o)/(\sigma^2_{\Delta\beta_a} + \sigma^2_{\Delta\beta_o})^{1/2}$, which is standard normal in the absence of a difference between the $\Delta\beta$s.

The log-odds ratios were also used to estimate changes resulting from the law in the number and percentage of drivers in nighttime fatal crashes. Consider now the contingency table for a given age group:

TIME OF CRASH	STATE			
	Comparison		Law-Change	
	Before	After	Before	After
Night	a	b	e	x
Day	c	d	g	h

If the two odds ratios are the same, then $xg/eh = bc/ad = e^{\beta_c}$, and $x = bceh/adg$. Now if, instead of x, the cell frequency is actually n, then the difference,

$$\Delta n = n - x = n\,[1 - e^{\beta_c - \beta_l}], \tag{4}$$

is the change in drivers involved in nighttime fatal crashes in the law-change state after the law went into force. This change can be expressed as a percentage:

$$\Delta P = 100\,\frac{\Delta n}{x} = 100\,(e^{\Delta\beta} - 1) \tag{5}$$

Estimates of net changes in fatal crash involvement due to the laws were obtained by comparing the estimated changes in the law-affected age group (ΔP_o) with the estimated change (ΔP_o) in the older group. Applying formula (5) to both age groups leads to the estimated net change in the law-affected group, due to the law, for state k:

$$\Delta P_k = \frac{\Delta P_a - \Delta P_o}{1 + \Delta P_o} \tag{6}$$

These methods were also used to determine what changes occurred in single vehicle nighttime fatal crashes and in all fatal crashes.

Data from the matched state pairs were analyzed by these methods in three different ways. The simplest analysis was based on data pooled across the nine law-change and nine comparison states. In this analysis the pooled data were treated as if they had all come from one law-change and one comparison state. This analysis disregards the variation between the states.

In the second method the "typical" change attributable to the laws was estimated as the average of the nine separate state estimates:

$$(\Delta P)_{\mathrm{av}} = 1/9\,(\Delta P_1 + \ldots + \Delta P_9). \tag{7}$$

The corresponding estimate for the variance of ΔP_k is

$$\sigma^2 = 1/8 \sum_{1}^{9} (\Delta P_k - (\Delta P)_{\mathrm{av}})^2, \tag{8}$$

and so the 95 percent confidence interval for the average is $(\Delta P)_{\mathrm{av}} \pm 1.96\,\sigma/\sqrt{9}$. National projections for the estimated impact of already existing laws and the impact of further law changes were estimated on the basis of $(\Delta P)_{\mathrm{av}}$.

Finally, to estimate the percentage change in fatal crashes that occurred in law-change states during the study period, the estimated changes were summed across the law-change states and divided by the estimated sum of the number of drivers who would have been in fatal crashes without the law change. This estimate corresponds to the "aggregate" change due to the laws. The aggregate change is a weighted average of the changes, whereas the typical change is an unweighted average. Statistical significance of the aggregate change was assessed in terms of the test statistic:

$$Z = \frac{1}{\sqrt{9}} \sum_{1}^{9} \frac{\Delta\beta_{ak} - \Delta\beta_{ok}}{(\sigma^2_{\Delta\beta_{ak}} + \sigma^2_{\Delta\beta_{ok}})^{1/2}} \tag{9}$$

In the absence of a law effect Z would have a standard normal distribution.

RESULTS

Table 2 shows the results of comparisons between the nine law-change and comparison state pairs of driver involvement in fatal crashes before and after the laws went into force. In the age groups to which the laws applied the ratio of nighttime fatal crash frequency to daytime fatal crash frequency was reduced more in the law-change states than in the comparison states after the laws were changed ($Z = -3.29$, $P = .001$). There was

TABLE 2
STATISTICAL TESTS COMPARING CHANGES IN FATAL CRASHES BEFORE AND AFTER CHANGES IN LEGAL MINIMUM DRINKING AGES

Fatal Crash Ratios	Drivers Covered By the Law Change Z-Statistic[a]	Drivers Covered By the Law Change Estimated Change(%)	Younger Drivers Z-Statistic[a]	Younger Drivers Estimated Change(%)	Older Drivers Z-Statistic[a]	Older Drivers Estimated Change(%)
Nighttime:daytime	−3.29***	−30	−.29	−6	−.53	−15
Single-vehicle nighttime:multiple-vehicle daytime	−2.85**	−41	−.32	−12	−.20	−9
All types	−1.20	−11	−.91	−7	+1.03	+11

[a] Z is standard normal under the null hypothesis. See text.
** $P < .01$, two-tailed.
*** $P = .001$, two-tailed.

also a greater decrease in single-vehicle nighttime fatal crashes than in multiple-vehicle daytime fatal crashes for these ages ($Z = -2.85$, $P < .01$). There were an estimated 30 percent fewer drivers in the law-affected age groups in fatal nighttime crashes in law-change states during the post-law periods studied and 41 percent fewer drivers in single-vehicle nighttime fatal crashes. There were fewer drivers involved in all fatal crashes in law-change states in the age groups to which the law applied, but the decrease was not statistically significant ($Z = -1.20$, $P > .10$).

There was some indication that fatal crashes involving drivers younger than law-affected drivers declined in law-change states, but the declines were not statistically significant. This was also the case when comparisons were based only on drivers one year younger. There were also small, nonsignificant changes for older drivers in law-change states.

The three sets of estimates of the net reductions in fatal crashes in law-change states among drivers to whom the law changes applied are given in Table 3. The three estimation methods yielded reasonably consistent re-

TABLE 3
ESTIMATED PERCENTAGE OF NET REDUCTIONS IN FATAL CRASHES INVOLVING DRIVERS COVERED BY LEGAL MINIMUM DRINKING AGES

Fatal Crash Type	Method of Estimation Aggregate	Method of Estimation Typical	Method of Estimation Pooled
Nighttime	−18*	−28***	−23*
Single-vehicle nighttime	−35*	−23	−25
All types	−20	−12	−14*

* $P < .05$, two-tailed.
*** $P < .001$, two-tailed.

TABLE 4
ESTIMATED CHANGES IN NIGHTTIME FATAL CRASHES AFTER CHANGES IN LEGAL DRINKING AGES AND NET CHANGES FOR AGE GROUP COVERED BY LAW CHANGE

LAW-CHANGE STATE	CHANGE IN NIGHTTIME FATAL CRASH INVOLVEMENT (%)		NET REDUCTION FOR DRIVERS COVERED BY LAW CHANGE*
	Drivers Covered by Law Change	Older Drivers	
Illinois	−30	−9	−23
Iowa	−60	−29	−45
Maine	−14	−3	−11
Massachusetts	−10	−5	−6
Michigan	−17	+40	−41
Minnesota	−56	−32	−34
Montana	+17	+3	+14
New Hampshire	−55	+80	−75
Tennessee	−43	−14	−33

* Average = 28, ±17 percent for a 95 percent confidence interval.

sults. Estimated reductions in nighttime fatal crashes ranged from 18 to 28 percent; all three estimates were statistically significant. Estimated reductions in driver involvement in single vehicle nighttime crashes ranged from 23 to 35 percent. Although these reductions were higher than the nighttime reductions, only the aggregate estimate was statistically significant, in part because of the smaller number of drivers in nighttime single vehicle crashes. There were smaller estimated reductions in all fatal crashes (12–20 percent); the pooled estimate was statistically significant.

Table 4 shows, for each of the nine law-change states, the estimated postlaw changes in nighttime fatal crashes involving law-affected and older drivers and the net effects. The net effects of the laws on drivers to whom the law changes applied are also displayed in Figure 2. There were estimated net reductions in nighttime fatal crashes in eight of the nine states, ranging from 6 to 75 percent. Montana was the lone state in which there was not a net reduction. The average reduction in the nine states was 28 percent (± 17 percent for a 95 percent confidence interval).

Figure 3 displays the estimated effects of driver involvement in nighttime fatal crashes as deseasonalized monthly time series from 1975 into 1980, as the nine states studied raised their legal minimum drinking ages.[6]

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[6] The estimated monthly series was obtained in three steps. First, for each month the data in the 2 × 2 table representing day/night and law change/no law change splits were pooled among states that had already raised the drinking age, and the frequency of nighttime crash involvement in the change state was estimated. The odds ratio of the modified table then equaled the odds ratio for a similar table obtained by pooling all prelaw change counts across all months and all states. Second, these estimated counts for the postlaw periods in the

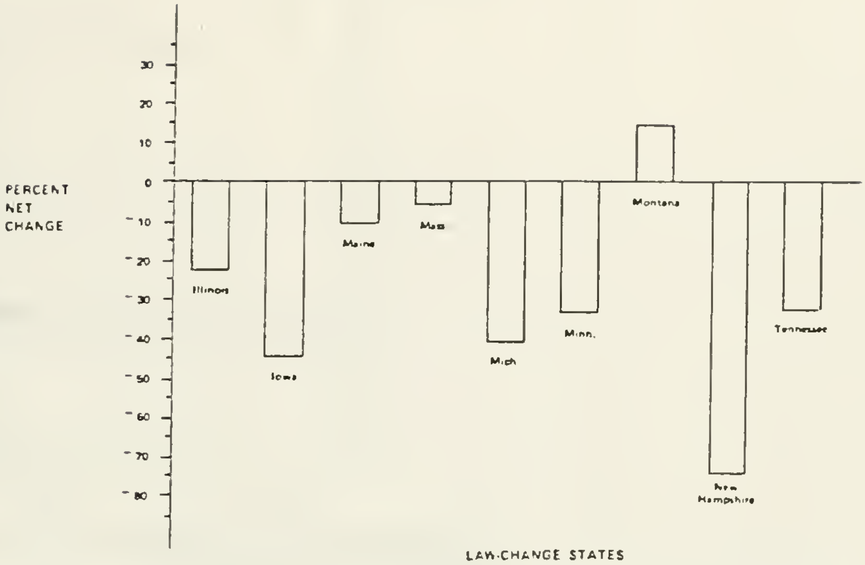

FIGURE 2.—Net changes in driver involvement in nighttime fatal crashes after changes in legal minimum drinking ages.

DISCUSSION

When states lowered their legal drinking ages in the early 1970s, the result, for both law-affected and younger drivers, was an increased involvement in fatal crashes, especially those crashes in which alcohol is most often involved. The results of the present study indicate that when states *raise* the drinking age, there is a corresponding *decrease* in fatal crashes among law-affected drivers. There is some evidence that raising the drinking age also affects younger drivers, but the reductions in the involvement of younger drivers in fatal crashes were not statistically significant.

As of January 1981 fourteen states (nine studied and five others) had raised the legal drinking ages in recent years. It is estimated that these law changes result each year in about 380 fewer young drivers involved in nighttime fatal crashes.[7] Thirty-one states (including seven of nine

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change states were added to the sum of the observed counts in the states that still did not change their laws. Third, this sum was smoothed using X-11. The estimated monthly reduction in fatal crash involvement was subdivided between law effect and other factors using a constant factor (40 percent). This factor represents the estimated reduction in the involvement of older drivers.

[7] This annual estimate was based on data from 1979, the last full year for which FARS data were available when the present study was conducted.

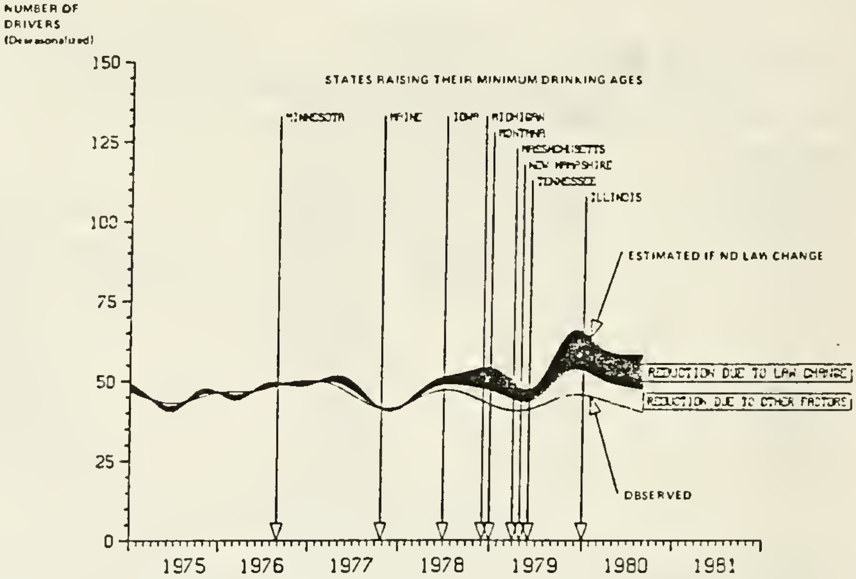

FIGURE 3.—Estimated net reduction in nighttime fatal crashes in nine states that raised their legal minimum drinking ages.

studied) as of January 1981 had a legal age limit for some or all alcoholic beverages that was less than twenty-one.[8] It is estimated that each year there could be about 730 fewer young drivers involved in nighttime fatal crashes if in all states the drinking age for all alcoholic beverages was raised to twenty-one. Any single state that rajses its drinking age can expect the nighttime fatal crashes of drivers of the affected age groups to drop by about 28 percent.

The societal benefits achieved in states that have raised their drinking ages are substantial; the benefits achievable if additional states raise their drinking ages would be even more substantial. Raising the legal minimum drinking age to 21 in all states would go far toward reducing the annual toll of motor vehicle deaths in the United States, particularly the deaths of young people and of others with whom they are involved in crashes.

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[8] If persons under twenty-one were allowed to purchase only beer containing not more than 3.2 percent alcohol by weight, the state was classified as having a drinking age of twenty-one.

SECTION 3.

Effects of the Raised Legal Drinking Age on Motor Vehicle Accidents in Michigan

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Motor vehicle accidents in Michigan during the period 1972–1979 were analyzed to examine whether the change in legal drinking age (from 18 to 21, in December, 1978) affected the numbers of 18-to-20-year-old drivers involved in alcohol-related crashes during 1979. Box-Jenkins time-series models were applied to monthly crash data for the years 1972–1979 for alcohol-related and non-alcohol-related accidents involving drivers aged 18–20, 21–24, and 25–45. The study results showed that for drivers aged 18–20, the actual total of alcohol-related crashes for 1979 was 31 percent less than the total expected for 1979, based on the time-series analyses of the 1972–1978 data. In contrast, actual alcohol-related crashes among drivers aged 21–24 were 9 percent higher than expected, and among drivers aged 25–45 were 5 percent higher than expected. The same trends by age were evident in the actual crash totals for 1979 vs. 1978, but differences revealed by use of the time-series models are more valid than comparison of year-to-year changes.

Introduction

What should be the minimum legal age for purchasing and consuming alcoholic beverages? This question has been highly controversial in the U.S. since 1971, when the 26th Amendment lowered the federal legal voting age to 18. Between 1970 and 1973, all 50 states lowered their legal voting age to 18, and 25 states lowered their legal drinking age. A common rationale was that if young people could vote in federal elections and be drafted for military service, they should have the right to purchase alcoholic beverages.

The liberalizing trend stopped in 1973 and began to reverse in 1976, as accumulating evidence connected the lowered legal drinking age with alcohol-related social problems, including increased numbers of motor vehicle crashes by young drivers. Between 1976 and 1980, at least 11 states raised their minimum drinking age from 18 to 19 or 20 or 21.

That down-and-up-again pattern occurred in Michigan. Effective January 1, 1972, the legal drinking age was lowered to 18. Subsequent research on rates of alcohol-related crashes revealed significant increases for drivers under age 21 (Douglass et al., 1974; Douglass and Freedman, 1977; Flora et al., 1978). In December, 1978, the legal drinking age in Michigan was raised to 21. Thus motor vehicle accident data for 1979 offered an opportunity to assess the effect of that change.

Methods

The data analyzed consisted of a 20-percent random sample of all reported motor vehicle crashes in the State of Michigan for the years 1972 through 1979. The condition of the driver, noted on the police report as "had been drinking" "or had not been drinking," was used as an indicator of alcohol-related or non-alcohol-related crash involvement.

Time-series models developed by Box and Jenkins (1976) were used to analyze the monthly frequencies of alcohol- and non-alcohol-related crashes involving drivers age 18–20, 21–24, and 25–45 for the years 1972 through 1979. That is, a distinctive model was developed for each of the time series of crashes. The models controlled for long-term trends, seasonal cycles, and other patterns in the time series of crash frequencies. This permitted a more precise assessment of the 1979 data for any effects of the raised legal drinking age. (See the Wagenaar, 1980, reference for details on the statistical models.) In brief, the analyses assessed the degree to which the actual 1979 accident totals differed from the number expected on the basis of previous trends.

Because the "had been drinking" measure is based on the subjective judgment of police officers investigating traffic accidents, it may not be a consistent indicator of alcohol-related crashes. For example, the change in the legal drinking age might have affected how readily police reported that a young driver had been drinking. Therefore, separate analyses were conducted, by driver age, of all late-night, single-vehicle crashes by male drivers. Previous research has shown that about 60 percent of all such "three-factor-surrogate" crashes are alcohol-related (Douglass et al., 1974). Because the numbers of such crashes are independent of subjective judgments by police officers, time-series analysis of those crash totals by driver age are a means of ensuring that findings concerning effects of the raised drinking age have not been affected by biases in the reporting of alcohol involvement. The analyses of "three-factor-surrogate" crashes by driver age did not reveal any reporting biases; as is shown below, the findings were consistent with those obtained by the time-series analyses of the "had been drinking" measure.

Table 1
Results of Time-Series Analyses

	Time-Series Model Estimate	Standard Error	Significance Level	Percentage Change
Drivers 18-20				
Had Been Drinking	−.376	.063	.01	−30.7
Had Not Been Drinking	−92.0	65.6	Not Significant	−6.8
Three-Factor Surrogate	−27.5	8.1	.01	−17.7
Drivers 21-24				
Had Been Drinking	.09	.05	.05	9.4
Had Not Been Drinking	−42.3	69.2	Not Significant	−3.3
Three-Factor Surrogate	3.0	6.7	Not Significant	2.3
Drivers 25-45				
Had Been Drinking	21.1	16.9	Not Significant	5.4
Had Not Been Drinking	−147.3	179.5	Not Significant	−4.5
Three-Factor Surrogate	3.0	12.2	Not Significant	1.3

Findings

Table 1 shows the results of time-series analyses of the three types of crashes (Had Been Drinking, Had Not Been Drinking, Three-Factor-Surrogate) involving drivers in the three age groups. The percentages in the last column indicate the difference between the actual totals for 1979 and the totals expected, based on the analyses of the 1972–1978 data. The percentage figures that are statistically significant represent the net change in crash frequency associated with the raised legal drinking age. As Table 1 shows, alcohol-related crashes among drivers age 18–20 decreased substantially in 1979, while non-alcohol-related crashes were only slightly lower.

As Table 1 shows, the numbers of non-alcohol-related motor vehicle crashes decreased for all three age groups in 1979. This was likely the result of several factors: the economic recession, increased fuel prices, and mild winter weather in late 1979 that reduced hazardous driving conditions. The overall reductions in crash involvement were too small to account for the significant reductions in alcohol-related crashes by drivers age 18–20. Furthermore, the contrast between those sizeable reductions and the small increases in alcohol-related crashes for drivers over age 21 supports the conclusion that the raised legal drinking age caused a significant reduction among drivers age 18–20.

Table 2
Drivers Involved In Motor Vehicle Crashes in Michigan, 1972–1979

	HAD BEEN DRINKING	HAD NOT BEEN DRINKING	TOTAL	PERCENT HAD BEEN DRINKING
AGE 18–20				
1972	8140	75630	83770	9.7
1973	8170	74990	83160	9.8
1974	8270	68370	76640	10.8
1975	10310	67855	78165	13.2
1976	11625	75755	87380	13.3
1977	11680	77800	89480	13.0
1978	12165	82775	94940	12.8
1979	9010	75290	84300	10.7
Projected 1979	*13000*	*80810*	*93810*	*13.8*
AGE 21–24				
1972	8260	72490	80750	10.2
1973	8315	69790	78105	10.6
1974	8320	62785	71105	11.7
1975	9355	62930	72285	12.9
1976	10160	70515	80675	12.6
1977	10750	74795	85545	12.6
1978	11435	79345	90780	12.6
1979	12845	73850	86695	14.8
Projected 1979	*11740*	*76390*	*88130*	*13.3*
AGE 25–45				
1972	23075	174315	197390	11.7
1973	20985	166250	187235	11.2
1974	20365	150945	171310	11.9
1975	20895	152560	173455	12.0
1976	21595	173265	194860	11.1
1977	21915	182050	203965	10.7
1978	23880	195670	219550	10.9
1979	24855	186185	211040	11.8
Projected 1979	*23590*	*195025*	*218615*	*10.8*
AGE 18–45				
1972	39475	322435	366910	10.9
1973	37470	311030	348500	10.7
1974	36955	282100	319055	11.6
1975	40560	283345	323905	12.5
1976	43380	319535	362915	11.9
1977	44345	334645	378990	11.7
1978	47480	357790	405270	11.7
1979	46710	335325	382035	12.2
Projected 1979	*48330*	*352225*	*400555*	*12.1*

Table 2 shows the crash totals for the three age groups of drivers during the eight-year period, along with the 1979 figures projected by the time-series analyses. Totals in this table differ slightly from official figures because they are based on a 20-percent random sample of all accident-involved drivers of passenger cars, trucks, or motorcycles (excluding drivers of buses, farm or construction equipment, bicycles, etc.). Note in the line for 1979 how the Had-Been-Drinking percentage decreased for drivers age 18–20, in contrast to the other age groups.

Figure 1 plots the eight-year pattern of alcohol-related crashes in Michigan for drivers in each of the three age groups.

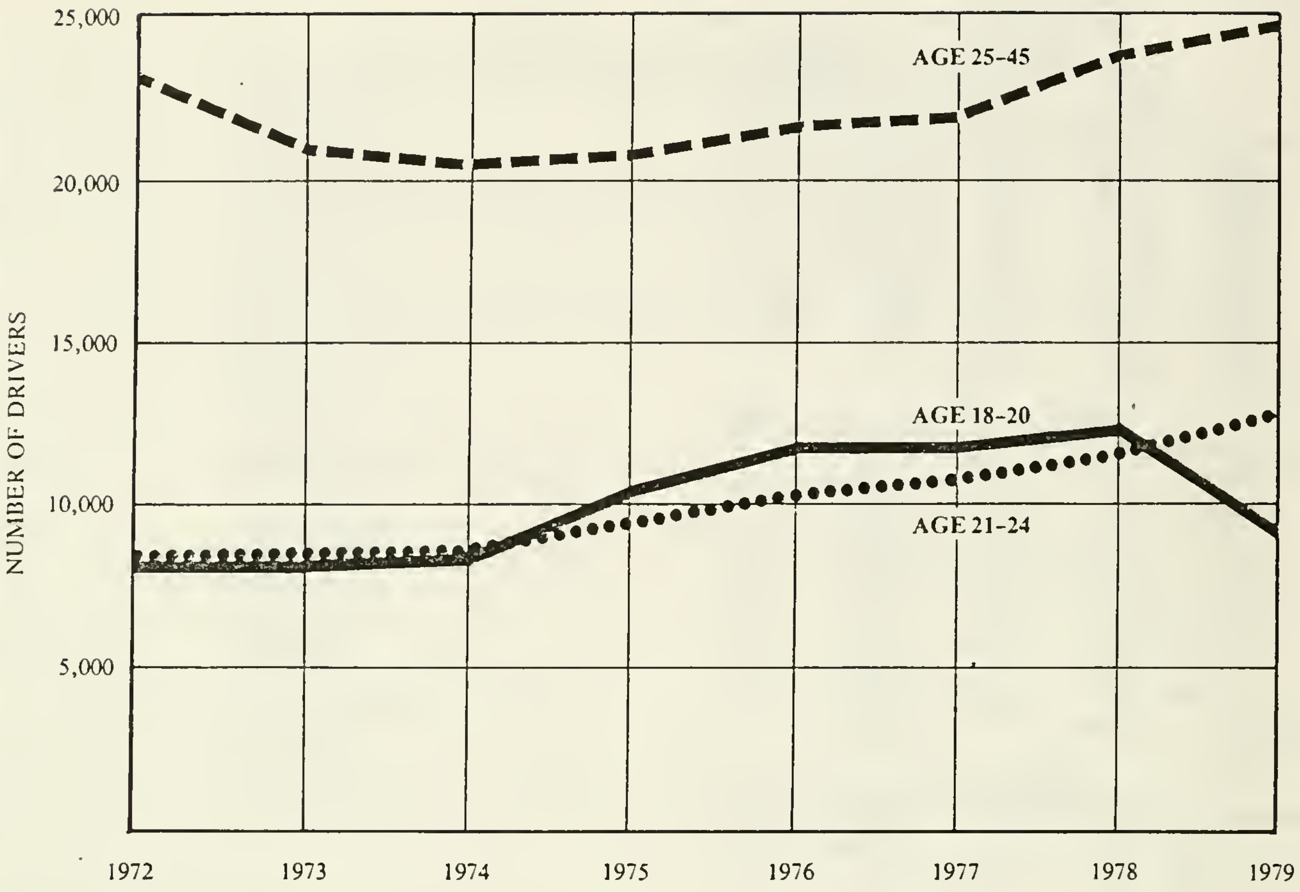

Figure 1. Crash-involved drivers in Michigan reported as having been drinking alcoholic beverages

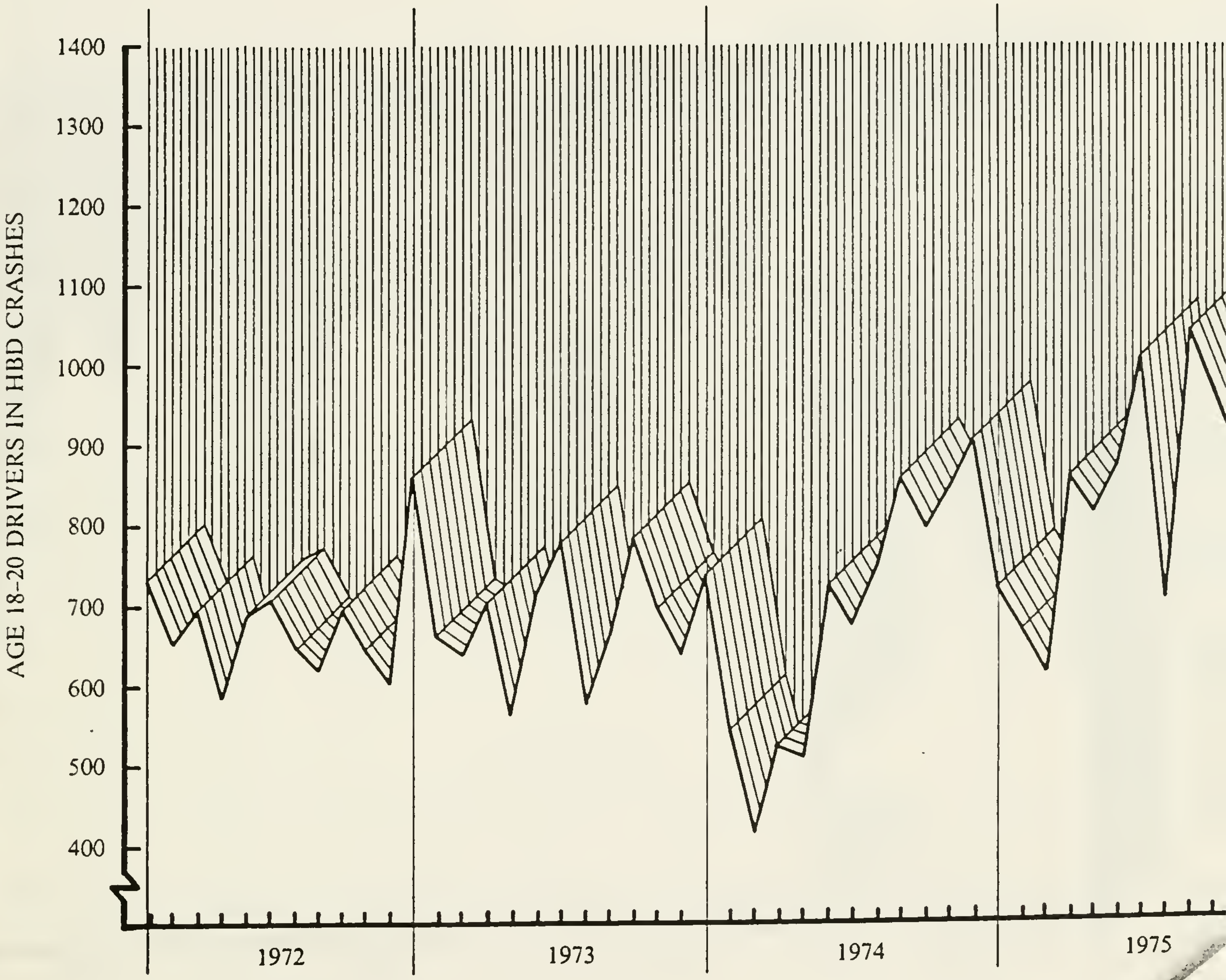

Figure 2 shows the monthly totals of drivers age 18-20 involved in alcohol-related crashes over the period 1972-1979. Note the significant drop in 1979.

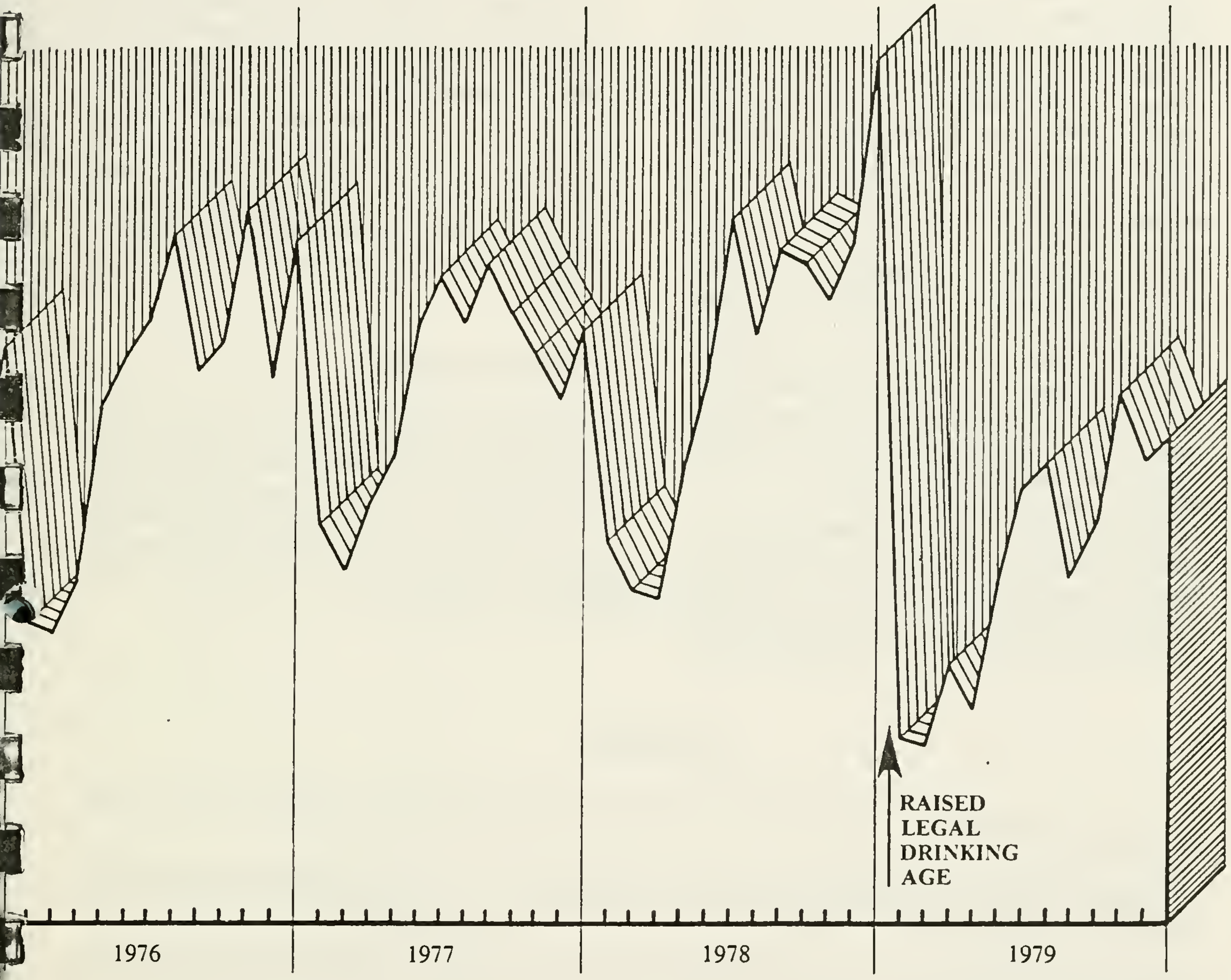

Figure 2. Monthly frequencies of alcohol-related crash involvements by drivers age 18-20, 1972-1979.

Conclusions

The study results indicate that raising of the minimum legal drinking age in late 1978 significantly reduced the numbers of drivers age 18–20 involved in alcohol-related motor vehicle accidents during 1979. The results are quite consistent with those of earlier research conducted by Douglass and Freedman (1977) on the effects of the lowered drinking age, from 21 to 18, in January, 1972. By analyzing police-reported "had been drinking" crash involvements, they found an association between the lowered legal drinking age and a 35-percent increase in the number of alcohol-related crashes by drivers age 18–20 for the period 1972–1975, compared to a base period of 1968–1971. Thus, when the legal drinking age was lowered, those types of driver crash-involvements increased by about 35 percent; and, when the legal drinking age was raised to 21 again, the involvements decreased by about 31 percent.

The study results support the proposition that a minimum legal drinking age of 21 in Michigan is an effective countermeasure against alcohol-related accident involvements by young drivers. That public policy does not eliminate such involvements, but it significantly reduces their numbers. The research results support the theory that the ease with which beverage alcohol can be obtained—and its visibility in the social environment—affect the amount and pattern of alcohol consumption and therefore the incidence of alcohol-related health problems. The theory is that with the raised drinking age, young people have more difficulty obtaining alcoholic beverages, so they obtain less, consume less, do less driving under the influence of alcohol, and are involved in fewer alcohol-related motor vehicle accidents.

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SECTION 4.

THE EFFECT OF RAISING THE DRINKING AGE
ON FATAL CRASH INVOLVEMENT:
A SECOND LOOK

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THE EFFECT OF RAISING THE DRINKING AGE ON FATAL CRASH INVOLVEMENT: A SECOND LOOK

By Mike A. Males

From 1970 to 1976, thirty states reduced their legal minimum purchase ages (LMPAs) for alcoholic beverages, resulting in 5 million new potential alcohol consumers age 18-20. From 1976 to 1982, fourteen states, acting to reduce a perceived increase in traffic accidents involving youthful drivers, raised their LMPAs back up again, though usually not to 21.[1] These LMPA increases meant that approximately 2 million fewer 18-20 year-olds could legally purchase alcohol in 1982 than in 1976.

A number of researchers have studied the experiences of these states and have generally concluded that there is a negative correlation between changes in a state's LMPA and the fatal crash rates of its youthful drivers; that is, when the LMPA is raised, youthful fatalities drop, and vice versa.[2]

As a result of these studies, Congress and a number of state legislatures are considering measures to raise the LMPA, usually to 21. Such legislation, in addition to its presumed effects on teenage traffic deaths, would create a new status crime for some 5 million youths, would possibly restrict youth employment in establishments which handle alcoholic beverages, and clearly raises questions regarding fairness. Whatever its good intentions -- and saving lives certainly ranks high as a good intention -- such a proposal deserves the most serious scrutiny.

Because of the lack of long-term data available to previous studies of the LMPA issue, their ambivalent conclusions in some cases, their choice of methodologies which amplify the effect of LMPA changes without providing documented conclusions as to such changes' overall effects, and their use of limited control groups to measure the effects of LMPA changes, this study attempts to examine the issue in a comprehensive manner using a larger body of data which has become available in the past three years.

Research Design and Method

This study analyzes three hypotheses drawn from the conclusions and implications of previous studies:

(1) That states which raise their LMPAs experience a decline in fatal traffic crashes involving youthful drivers relative both to states which do not raise their LMPAs and to older drivers within LMPA-change states.

(2) That states with a LMPA of 20 or 21 have a lower rate of fatal crashes involving under-20 drivers than do states which permit teenagers to purchase some or all forms of alcoholic beverages.

(3) That laws raising the LMPA carry no significant side effects which would tend to negate their benefits.

The data base for this study consists of computer printouts from the U.S. Department of Transportation's excellent Fatal Accident Reporting System (FARS) data files showing, for each of the 50 states, the fatal accident involvement of drivers ages 17 and under, 18, 19, 20, 21, 22-24, and 25 and older, for each of the eight years from 1975 to 1982.[3] Data on the numbers of drivers' licenses by age group and rate of change in licenses for each state is taken from the U.S. Federal Highway Administration's reports for 1974 and 1979. All in all, 400 state-years of data are used for each age group, including 57 state-years for each age group in 14 states with increased LMPAs.

States are then classified according to their LMPAs. States which maintained a uniform LMPA of 20 or 21 during the period examined are classified as high drinking age (HDA) states; those which had a uniform LMPA of 18 or 19 are placed in the low drinking age (LDA) category; and those states which had a LMPA of 18 or 19 for certain types of beer or wine and 21 for more intoxicating beverages are classified as graduated drinking age (GDA) states (see Table 3). States which increased their LMPAs between 1975 and 1981 are reclassified accordingly, and if the LMPA change occured during the middle eight months of the year, that year's data for that state is excluded from comparisons.

No allowance is made for differences between states in alcohol involvement rates in fatal accidents or for out-of-state drivers involved in fatal accidents. FARS data from 29 states believed to report alcohol involvement accurately shows there is little difference between HDA and LDA states in this respect, and research also indicates out-of-state drivers have no significant impact on a state's fatal crash rates.[4]

The analysis treats each state as a separate case. Since the values are unweighted, radical values from smaller states are, in uniform methods for the three categories of states, excluded from comparisons. Only states with at least two years' data avaliable on both sides of an LMPA change are used for comparative purposes.

Fatal accident rates are determined for each age group and year by dividing the number of drivers involved in fatal accidents in each state by the number of drivers' licenses that state issued to members of that age group that year. Drivers' license totals are escalated or de-escalated according to changes in each state.

Fatal accident ratios are determined by dividing each state's fatal accident total for each age group and year by that state's total number of fatal accidents for that year.

Two control groups are used: the fatal accident rates and ratios of each age group and year for drivers in the United States as a whole, and the rates and ratios of drivers 25 and older within each state. Since no more than four states containing at most 5% of the U.S. population changed their LMPAs in any one year, the U.S. fatality rates and ratios are assumed representative of states which did not change their LMPAs. Drivers 25 and older are assumed to be independent of LMPA changes. These two controls are used to factor out national and in-state trends which affect fatality rates but which are not related to the LMPA or changes in the LMPA.

The resulting rates and ratios of fatal crashes for each state, age group and year are analyzed as follows:

(1) LMPA-change states are compared with the U.S. as a whole for the years surrounding the LMPA change to determine if any relative decrease has taken place in the LMPA-change states for youthful drivers.

(2) Drivers in the affected age groups in LMPA-change states are compared with drivers age 25 and older within those states. The changes are then normalized to those occuring in the U.S. as a whole for each age group.

(3) The categories of HDA, LDA, and GDA states are compared to determine if HDA states have lower rates of youthful involvement in fatal crashes.

The purpose of these comparisons is to determine the relative changes, if any, which result from a higher LMPA or an increased LMPA. This study assumes that if there is any significant effect on crash rates resulting from a state's LMPA or change in LMPA, that effect will stand out in analysis of each age group's overall fatal accident rate for that state. If establishing a higher LMPA indeed saves lives, that savings should be clearly apparent from

TABLE 1

NET CHANGE IN FATALITY RATES OF YOUTHFUL DRIVERS IN STATES WHICH RAISED THEIR DRINKING AGES, 1977-80

State	Date of LMPA Change	Age Groups Affected	Average Fatality Rates*		Pct. Change	Net Change re:	
			Before	After		U.S. Change*	Drivers 25+ Change**
Florida	10/80	18	85	66	- 22	+ 5	- 1
Georgia	9/80	18	86	81	- 6	+ 21	+ 8
Illinois	1/80	19	87	59	- 32	- 5	+ 5
		20	80	56	- 30	- 8	+ 2
Iowa	7/78	18	94	74	- 21	0	+ 18
Maine	10/77	18	98	96	- 2	+ 7	+ 14
		19	101	110	+ 9	+ 16	+ 23
Massachusetts	4/79	18	75	56	- 25	- 2	- 11
		19	78	63	- 19	- 3	- 10
Michigan	12/78	18	86	54	- 37	- 21	- 6
		19	89	53	- 40	- 28	- 13
		20	75	55	- 27	- 10	+ 5
Montana	1/79	18	126	104	- 17	- 1	+ 2
Nebraska	5/80	19	94	70	- 26	- 4	- 7
New Hampshire	5/79	18	82	73	- 11	+ 16	+ 14
		19	98	83	- 15	+ 1	- 1
New Jersey	1/80	18	82	72	- 12	+ 12	+ 10
Rhode Island	7/80	18	74	61	- 18	+ 9	- 3
Tennessee	6/79	18	139	97	- 30	- 3	+ 9
AVERAGE NET CHANGE						- 0.5	+ 1.4

*Per 100,000 drivers of the affected age group. Since the use of rates and ratios produced very similar results, rates are used here.

**Relative change within each state normalized to the U.S. as a whole.

TABLE 2

NET CHANGE IN FATAL CRASH RATES OF DRIVERS OF THE NEW LMPA IN STATES WHICH RAISED THEIR LMPAs, 1977-80

State	Age Group Affected	Average Fatality Rates* Before	Average Fatality Rates* After	Pct. Change	Net Change relative to: U.S. Change*	Net Change relative to: Drivers 25+ Change**
Florida	19	85	91	+ 7	+ 31	+ 25
Georgia	19	103	72	- 30	- 6	- 19
Illinois	21	83	52	- 37	- 21	- 11
Iowa	19	95	82	- 14	- 3	+ 15
Maine	20	93	119	+ 28	+ 36	+ 43
Massachusetts	20	66	60	- 9	+ 5	- 1
Michigan	21	72	56	- 22	- 9	+ 6
Montana	19	118	133	+ 13	+ 25	+ 28
Nebraska	20	76	75	- 1	+ 18	+ 15
New Hampshire	20	72	73	+ 1	+ 15	+ 13
New Jersey	19	84	77	- 8	+ 8	+ 6
Rhode Island	19	72	58	- 19	+ 5	- 7
Tennessee	19	125	122	- 2	+ 14	+ 26
AVERAGE NET CHANGE					+ 9.1	+ 10.8

*Per 100,000 drivers of the affected age group.

**Relative change within each state normalized to the U.S. as a whole.

this analysis.

Results

Table 1 shows the results of comparisons between the fatality rates of the affected age groups in the thirteen LMPA-change states and those of the U.S. as a whole during the period 1975 to 1982. Since the fatality rates of all drivers, particularly younger drivers, experienced a decrease during that period nationwide, the affected age groups for each state are normalized to both controls in the two righthand columns to account for that decrease.

As can be seen from the table, there is virtually no impact discernable from the increased LMPAs. The aggregate of LMPA-change states experienced only a miniscule (less than 1%) decrease in fatality rates for the affected age groups relative to the fatality rate decrease experienced by the U.S. as a whole and experienced a small increase (1.4%) in the fatality rates of the affected age groups compared to that of drivers age 25 and older within each of the LMPA-change states.

Table 2 examines one possible side effect of raising the LMPA -- a change in the accident rate of drivers the same age as the new LMPA; ie, those drivers which, to the extent the new law is effective, will be the new first-year alcohol drinkers in LMPA-change states.

The table indicates there may be a definite negative impact of raising the LMPA on LMPA-age drivers; that is, if a state raises its drinking age to 21, there may be an increase in fatalities involving 21 year-old drivers. Relative increases in the fatality rates of LMPA-age drivers occurred in 9 of the 14 LMPA-change states and ranged from 6% to 43%; the average relative increase was about 10% for the LMPA-change states compared to the experience of the nation as a whole and to drivers 25 and older within each LMPA-change state.

Table 3 shows the fatal accident rates for various age groups in the HDA, LDA, and GDA states for three selected years. All three categories of states appear large enough and reasonably representative of the nation in terms of size and geographical distribution to serve as bases for comparison.

Somewhat unexpectedly, those states which provide alcohol to 18 year-olds (in the case of Illinois before 1980, 19 year-olds) in a limited manner, the GDA states, consistently experience a fatality rate for all three categories of younger drivers -- 17 and under, 18-20, and 21-24 -- which is about 7% lower than that of states with a LMPA of 21. When adjusted to account for the relative fatality rates of 25-and-older drivers in the three categories of states, the resulting fatal accident ratio for under-25 drivers to that of over-25 drivers is 11% less in GDA than in HDA states.

States with a LDA, on the other hand, have an unadjusted fatal accident rate for under-25 drivers which averages 10% higher than that of the HDA states. Older drivers in LDA states also have a higher fatality rate, and when the fatality rate for younger drivers in LDA states is adjusted to reflect those states' higher overall fatality rates, the difference between the ratio of under-25 to over-25 fatal accidents between LDA and HDA states is only 3%.

Discussion

Although the fatality rate for drivers under the age of 25 declined by 29% nationwide between 1979 and 1982 (compared to 14% for drivers 25 and older), changes in state LMPAs appear to have had nothing to do with the decrease. States which raised their drinking ages between 1976 and 1982 experienced no decrease in the number of fatal crashes involving drivers in the age groups affected by the laws compared to those states which did not.[5] Two-thirds of the states which raised their LMPAs did experience a significant

and disproportionate increase in the fatality rates of drivers just older than the new LMPA, but whether this increase is the result of the LMPA change or simply associated with it cannot be determined with assurance from the data. And those states which permit teenagers to purchase alcohol in a limited manner have lower fatal crash rates for both teenagers and all under-25 drivers than do those states which prohibit alcohol purchases by persons under 21 years of age. Those states which permit 18 and 19 year-olds to purchase all forms of alcohol have higher fatality rates involving youthful drivers, but two-thirds of the difference is attributable to the tendency of LDA states to have higher fatality rates for older drivers as well.

All three of the hypotheses advanced by earlier studies, then, appear not to be proven. There is no benefit to be derived from a national LMPA of 21. There may, however, be some deleterious effect of a LMPA of 21 in terms of increased deaths among 21-24 year-old drivers. Drivers in this age group are 25% more likely to be involved in an alcohol-related fatal crash and 40% more likely to be involved in a fatal accident involving drunk driving (BAC .10 or more) than are 16-20 year-old drivers.[6] Increased LMPAs in a number of states may be a factor in the lesser decrease in fatal crash involvement of 21-24 year-olds nationwide between 1979 and 1982 compared to under-21 drivers.

The question is, then, what solutions might help alleviate what is clearly a serious national problem -- misuse of alcohol, particularly by youths. First, a national drinking age may help by preventing teenagers from driving across state lines in efforts to find favorable alcohol purchase laws. Second, and most important, it is clear from the literature[7] that youths who drink with peers and in unsupervised settings are more likely to develop alcohol problems than those whose drinking habits are influenced by their parents, families, and adult supervision in general. Laws, even those which (as in Montana) provide stiffer penalties for underage possession of alcohol than for adult DUI, have proven to be a poor method of discouraging the one teenager in 3,500 who will be involved in an alcohol-related fatal crash each year or the 1 adolescent in 7 who will experience other alcohol-related problems. Laws, to the extent they can be effective, should emphasize encouraging parental involvement in the development of youths' practices and attitudes toward alcohol and should focus on punishment and prohibition not as general measures but as means of preventing and controlling alcohol abuse.

Viewed in this light, it is not surprising that states with a GDA have fewer fatal crashes involving youths, and apparently fewer alcohol-related crashes as well, than those states with a uniform drinking age.[4] To the extent that a graduated drinking age is effective, it provides a transition period for youths -- not an ideal one, but one which is apparently better than the abrupt transition provided by uniform drinking age states.

Graduated drinking age laws need not be limited to discerning between types of alcoholic beverages; they can also make distinctions between public and private use of alcohol, independent use and use under the supervision of parents or guardians, and use with meals in restaurants versus solo drinking in bars, to name only three types of graduations which may prove useful. Properly designed graduated drinking laws are likely to be much more effective in reducing youthful alcohol abuse than a uniform LMPA of 21 which suddenly turns the youth loose on all forms of alcohol and public drinking at the very age when alcohol abuse and fatal traffic accidents peak.

Reconciliation with Previous Studies

The conclusions of this study are, in varying degrees, at odds with previous studies on the subject. Rather than attempting to reconcile these results with all previous studies, only the most comprehensive and most quoted study -- that by Williams et al for the Insurance Institute for Highway Safety in 1981 -- will be reviewed.

The IIHS study examines fatal crash involvement for youthful drivers in 9 states which raised their LMPAs from 1976 to 1981 and in 9 matched control states which did not and additionally compares crash rates for drivers affected by the LMPA increase in LMPA-change states with that of drivers older than the new LMPA but less than 22 years old. The study analyzes crash rates by comparing the ratio of nighttime to daytime fatal accidents before and after the LMPA increase for the affected age groups within the LMPA-change state and for both controls.

The IIHS study concludes "that each year there could be about 730 fewer young drivers involved in nighttime fatal crashes if in all states the drinking age for all alcoholic beverages was raised to twenty-one" and that "any single state that raises its drinking age can expect the nighttime fatal crashes of drivers of the affected age groups to drop by about 28 percent."[8]

However, FARS data for those and other LMPA-change states shows no such decrease, nor even a lesser decrease of 12-14% in overall fatal crashes involving drivers of the affected age groups which would be expected if nighttime deaths were reduced by 28%, nor any decrease at all, in fact. Where are the hundreds of lives saved? An equally important but much less quoted conclusion of the IIHS study appears in its text: the decrease "in all fatal crashes in the law-change states in the age groups to which the law applied. . .was not statistically significant."[9] In other words, no decrease in overall fatalities -- no net savings of lives -- can be attributed to the increase in the LMPAs.

Narrowly construed, then, this study does not disagree with the IIHS conclusions. However, the IIHS predicts that a national LMPA of 21 will "go far toward reducing the annual toll of motor vehicle deaths in the United

States" and will provide "substantial" societal benefits.[8] It does not appear that such a broad conclusion is warranted by the relatively narrow data base and restrictive methodology used in the IIHS study.

First of all, had the authors of the IIHS study examined the actual before-and-after changes in the nine LMPA-change states surveyed, they would have calculated the decrease in fatal accidents among the affected age groups at only 6%, which means that at most, the LMPA increases resulted not in the savings of 380 lives per year, as the IIHS authors assert, but in the savings of at most 70 lives. Even the lower benefit would be a very worthwhile achievement were it not for the fact that the 6% decrease in the LMPA-change states does not differ significantly from the decrease in fatal accidents in the 18-20 year-old age group all across the nation during that period. In four of the 9 IIHS pairs of states, the fatal accident rate for youths of the affected age groups declined at a faster rate in the control states than in the LMPA-change states following the drinking age increase; and if 1981 and 1982 data are added in, several of the pairs reverse their positions, suggesting that the IIHS data base is not a very stable one.

That instability may result from the fact that in twelve of the eighteen states analyzed in the IIHS study, the total number of fatal accidents among drivers in the affected age groups averages less than 80 per year, so that a shift of only a half-dozen fatalities per year from night to day, from single-vehicle to multiple-vehicle, from control state to LMPA-change state, could double or reverse the results of the study. The 15½ years of post-law data, an average of 20 months per state, is not enough to provide a firm foundation for the seemingly strong conclusions the authors reach. It is not clear that the short-term comparisons of single state pairs or the aggregate of the comparisons can be applied to the nation as a whole.

The control problem is further complicated by the IIHS study's choice of drivers older than the new LMPA but younger than 21 to serve as a basis for comparing before-and-after experiences of the affected age groups. It is not clear that this older age group is independent enough of the LMPA change to serve as a control group, particularly since LMPA-change states appear to have suffered a relative increase in LMPA-age group fatal accidents.

What the IIHS study does indicate is that there is at least a short-term shift in the pattern of drunk-driving accidents involving younger drivers in states which raise their LMPAs. It is plausible to speculate that raising the LMPA results in the exclusion of some youths from bars at night, resulting in an increase in daytime drinking and alcohol-related crashes by youths.[10] Only a small shift of that kind could lead to the results uncovered by the IIHS study. What the IIHS study does not prove, or even attempt to prove, is that there is any overall decrease in fatalities caused by youthful drivers following an LMPA increase -- the most the IIHS study shows is that there may be a shift of fatal crashes from one time period to another, which is not much of a benefit.

Other studies,[2] many of which use the same methodology as the IIHS study combined with even more limited data bases and omission of national trends, similarly do not provide a basis on which lawmaking affecting millions of youths can proceed. Comparison of night-to-day fatal accident trends is a logical approach to analyzing alcohol control measures since nighttime fatal crashes are 1½ times more likely to involve alcohol than daytime ones, but such methodology is also highly vulnerable to fluctuations in data and does not by itself provide conclusions easily translatable into whether lives are actually saved or lost.

It appears that a major problem in the public's perception, and in lawmakers' reaction, with regard to the effect of drinking age increases has been the tendency of researchers to overstate their conclusions and to imply greater firmness in the data than actually exists. While it could be argued from this study that adoption of a national graduated drinking age would cut fatalities in the uniform drinking age states by 11-17% and save 2,100 lives per year, the data, particularly on the involvement of alcohol in fatal accidents and on the particular reasons for fluctuations in fatal accident rates among the various age groups, is not strong enough to support such authoritative-sounding and quotable numerical extrapolations.[5] In a climate in which many are justifiably demanding that something be done about the drunk driving carnage, it is important that we carefully examine proposed solutions to be sure they are warranted by the evidence at hand.

-- END --

References.

1. Alexander C. Wagenaar, "Legal Minimum Drinking Age Changes in the United States: 1970-1981," Alcohol Health and Research World, Winter 1981/82, pp 21-26. Oklahoma, whose drinking age was reduced by court order in 1976, is also included as a state which reduced its LMPA.

2. Allan F. Williams, et al, "The Effect of Raising the Legal Minimum Drinking Age on Involvement in Fatal Crashes," The Journal of Legal Studies, Vol. XII, January 1983, pp 169-70; Highway Safety Research Institute, "Effects of Raised Legal Drinking Age on Motor Vehicle Accidents in Michgan," HSRI Research Review, January/February 1981, pp 2-8; Terry M. Klein, "The Effect of Raising the Legal Drinking Age on Traffic Accidents in Maine," USDOT HS-806-149, December 1981; Delmas M. Maxwell, "Impact Analysis of the Raised Legal Drinking Age in Illinois," National Highway Traffic Safety Institute Technical Report, USDOT HS-806-115, December 1981; Virginia Highway and Transportation Research Council, "The Effects of Lowering the Legal Drinking

Age in Virginia," January 1981; John Volpe et al, Final Report, Presidential Commission on Drunk Driving, U.S. Government Printing Office, November 1983, pp 10-11.

3. U.S. Department of Transportation, Fatal Accident Reporting System, "Drivers Involved in Fatal Accidents by State and Age," FARS file for 1975-81, 1982. Acknowledgement is gratefully made to Ms. Grace Hazzard of the NHTSA for her excellent data provision capabilities.

4. U.S. Department of Transportation, National Center for Statistics and Analysis, "Alcohol in Fatal Accidents, National Estimates -- USA," USDOT HS-806-371, January 1983. Estimates result from chart on page 5.

5. Brian O'Neill, "Recent Trends in Motor Vehicle Crash Deaths," Insurance Institute for Highway Safety, October 1983. O'Neill concludes, "there is no evidence. . .to support the hypothesis that recently implemented alcohol countermeasures were responsible for the national reductions in motor vehicle deaths" (p 3).

6. Reference 4, p 42 (errata sheet).

7. See Cherry Lowman, "U.S. Teenage Alcohol Use in Unsupervised Social Settings," Alcohol Health and Research World, Winter 1981/82, pp 46, 50; also "Facts for Planning, Alcohol and Youth" series, Alcohol Health and Research World, Fall 1981 to Spring 1983 generally.

8. Williams et al, op cit (refernce 2), p 179.

9. Ibid, p 176.

10. Klein, op cit (reference 2), p 9.

INVOLVED IN FATAL ACCIDENTS

ALL DRIVERS BY AGE, SEX AND BAC
RUN DATA ON 2-9-84 - FARS FILES FOR 1982 - #7170

1982 - SUB127(04-FEB-84)

	TOTAL	ALCOHOL TEST RESULTS									
		TOTAL TESTED	.00	.01-.05	.06-.09	.10-.15	.16-.20	.21 & GREATER	UNKNOWN TEST RESULTS	NOT TESTED	UNKNOWN IF TESTED
TOTAL											
TOTAL	56,029	22,837	6,927	1,142	1,184	2,847	2,771	3,618	4,348	29,644	3,548
DRIVER AGE											
15 & UNDER	412	113	63	4	3	6	4	4	29	281	18
16	1,003	396	182	28	33	45	22	15	71	541	66
17	1,667	707	258	48	57	102	63	39	140	854	106
18	2,282	1,087	303	68	91	203	126	102	194	1,031	164
19	2,515	1,217	304	72	82	202	171	137	249	1,121	177
20	2,391	1,170	276	74	79	207	156	133	245	1,078	143
21	2,495	1,229	252	64	81	218	195	179	240	1,125	141
22	2,386	1,128	241	60	78	191	166	170	222	1,106	152
23	2,144	1,003	200	59	75	141	146	171	211	1,010	131
24	1,993	892	201	51	40	132	134	164	170	975	126
25-29	8,444	3,756	849	176	178	521	571	748	713	4,216	472
30-34	6,343	2,627	676	125	121	299	354	521	531	3,375	341
35-39	4,695	1,824	558	80	75	191	232	382	306	2,596	275
40-44	3,289	1,181	375	49	48	116	123	229	241	1,927	181
45-49	2,613	957	345	38	30	77	85	223	159	1,515	141
50-54	2,367	822	330	35	32	67	68	154	136	1,400	145
55-59	2,169	792	373	34	32	44	60	104	145	1,266	111
60-64	1,772	641	324	23	22	41	37	74	120	1,060	71
65-69	1,298	433	235	15	16	19	25	40	83	798	67
70 & OVER	2,596	833	575	38	10	24	29	24	133	1,631	132
UNKNOWN	1,155	29	7	1	1	1	4	5	10	738	388
MALE											
TOTAL	44,370	19,088	5,232	960	1,036	2,477	2,467	3,222	3,694	22,618	2,664
DRIVER AGE											
15 & UNDER	332	94	54	4	2	2	4	4	24	222	16
16	783	323	145	19	28	37	19	15	60	403	57
17	1,309	581	202	40	52	87	49	34	117	640	88
18	1,823	903	236	55	79	177	113	89	154	790	130
19	2,060	1,036	238	64	69	178	154	116	217	873	151
20	1,969	985	213	67	67	174	136	117	211	857	127
21	2,074	1,083	204	54	74	196	178	163	214	873	118

SEE FOOTNOTES AT END OF TABLE.

ALL DRIVERS BY AGE, SEX AND BAC
RUN DATA ON 2-9-84 - FARS FILES FOR 1982 - #7170-CONTINUED

1982 - SUB127(04-FEB-84)

	TOTAL	ALCOHOL TEST RESULTS								NOT TESTED	UNKNOWN IF TESTED
		TOTAL TESTED	.00	.01-.05	.06-.09	.10-.15	.16-.20	.21 & GREATER	UNKNOWN TEST RESULTS		
MALE											
DRIVER AGE											
22	1,948	973	190	54	67	176	147	146	193	847	128
23	1,785	863	151	49	71	124	133	149	186	807	115
24	1,687	776	156	44	36	120	122	146	152	800	111
25-29	6,976	3,256	672	153	159	451	512	689	620	3,306	414
30-34	5,166	2,211	504	106	108	269	317	459	448	2,678	277
35-39	3,773	1,505	426	59	65	162	197	337	259	2,032	236
40-44	2,642	984	292	42	38	93	108	201	210	1,516	142
45-49	2,105	789	252	30	27	68	77	200	135	1,210	106
50-54	1,881	672	252	31	25	55	58	138	113	1,094	115
55-59	1,685	611	256	23	29	33	56	90	124	992	82
60-64	1,350	486	222	19	17	39	35	62	92	810	54
65-69	948	326	160	14	13	17	22	40	60	571	51
70 & OVER	1,913	610	402	32	9	19	27	23	98	1,203	100
UNKNOWN	161	21	5	1	1	-	3	4	7	94	46
FEMALE											
TOTAL	10,675	3,742	1,694	182	148	369	303	395	651	6,388	545
DRIVER AGE											
15 & UNDER	80	19	9	-	1	4	-	-	5	59	2
16	220	73	37	9	5	8	3	-	11	138	9
17	358	126	56	8	5	15	14	5	23	214	18
18	459	184	67	13	12	26	13	13	40	241	34
19	455	181	66	8	13	24	17	21	32	248	26
20	422	185	63	7	12	33	20	16	34	221	16
21	419	146	48	10	7	22	17	16	26	251	22
22	438	155	51	6	11	15	19	24	29	259	24
23	358	140	49	10	4	17	13	22	25	202	16
24	306	116	45	7	4	12	12	18	18	175	15
25-29	1,467	500	177	23	19	70	59	59	93	909	58
30-34	1,177	416	172	19	13	30	37	62	83	697	64
35-39	922	319	132	21	10	29	35	45	47	564	39
40-44	647	197	83	7	10	23	15	28	31	411	39
45-49	507	168	93	6	5	9	8	23	24	304	35

SEE FOOTNOTES AT END OF TABLE.

ALL DRIVERS BY AGE, [illegible]X AND BAC
RUN DATA ON 2-9-84 - FARS FILES FOR 1982 - #7170-CONTINUED

1982 - SUH127(04-FEB-84)

	TOTAL	ALCOHOL TEST RESULTS									
		TOTAL TESTED	.00	.01-.05	.06-.09	.10-.15	.16-.20	.21 & GREATER	UNKNOWN TEST RESULTS	NOT TESTED	UNKNOWN IF TESTED
FEMALE											
DRIVER AGE											
50-54.............	486	150	78	4	7	12	10	16	23	306	30
55-59.............	484	181	117	11	3	11	4	14	21	274	29
60-64.............	422	155	102	4	5	2	2	12	28	250	17
65-69.............	350	107	75	1	3	2	3	-	23	227	16
70 & OVER.........	682	223	173	6	1	5	2	1	35	427	32
UNKNOWN...........	16	1	1	-	-	-	-	-	-	11	4
UNKNOWN											
TOTAL.............	984	7	1	-	-	1	1	1	3	638	339
DRIVER AGE											
21................	2	-	-	-	-	-	-	-	-	1	1
23................	1	-	-	-	-	-	-	-	-	1	-
25-29.............	1	-	-	-	-	-	-	-	-	1	-
45-49.............	1	-	-	-	-	-	-	-	-	1	-
70 & OVER.........	1	-	-	-	-	-	-	-	-	1	-
UNKNOWN...........	978	7	1	-	-	1	1	1	3	633	338

- EITHER ZERO (0) OR DATA NOT AVAILABLE

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981

1975

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
TOTAL	55,139	4,116	2,751	2,836	2,492	2,464	2,223	2,111	1,944	34,023	179
ACCIDENT STATE											
ALABAMA	1,128	81	52	45	39	43	35	36	35	756	6
ALASKA	149	10	3	9	3	13	10	6	10	84	1
ARIZONA	848	62	34	47	42	42	32	39	29	515	6
ARKANSAS	686	54	31	34	25	27	25	26	19	445	-
CALIFORNIA	5,173	316	244	228	241	223	230	229	217	3,224	21
COLORADO	682	57	26	27	24	28	29	40	30	419	2
CONNECTICUT	501	36	31	21	30	22	28	15	17	300	1
DELAWARE	151	12	6	8	7	6	7	6	3	96	-
DISTRICT OF COLUMBIA	92	3	1	1	1	4	1	4	7	67	3
FLORIDA	2,517	189	102	125	86	102	86	86	70	1,667	4
GEORGIA	1,635	130	61	80	57	79	62	50	46	1,057	13
HAWAII	168	14	6	7	7	5	8	11	5	105	-
IDAHO	312	34	12	11	14	8	10	14	13	192	4
ILLINOIS	2,580	170	127	144	128	129	98	102	98	1,579	5
INDIANA	1,452	123	74	68	68	56	59	50	44	908	2
IOWA	869	80	51	47	39	45	40	23	39	505	-
KANSAS	650	57	32	28	29	42	25	24	24	386	3
KENTUCKY	1,074	82	55	57	34	44	46	36	41	672	7
LOUISIANA	1,114	97	54	52	40	42	49	48	44	688	-
MAINE	255	22	10	18	18	10	9	12	10	145	1
MARYLAND	858	54	47	47	32	42	48	35	36	513	4
MASSACHUSETTS	1,033	87	75	69	60	57	56	48	47	534	-
MICHIGAN	2,251	180	135	138	86	91	110	108	87	1,316	-
MINNESOTA	965	86	66	57	52	53	37	35	30	548	1
MISSISSIPPI	672	66	21	23	25	26	19	19	17	435	21
MISSOURI	1,313	115	73	59	53	55	47	48	47	816	-
MONTANA	319	22	17	17	12	10	11	11	8	210	1
NEBRASKA	462	50	20	30	28	27	18	19	13	257	-
NEVADA	244	20	11	8	7	10	8	7	12	161	-
NEW HAMPSHIRE	180	17	7	5	5	6	8	10	7	115	-
NEW JERSEY	1,312	74	81	80	57	46	42	44	42	844	2
NEW MEXICO	603	53	27	25	19	20	30	24	23	381	1
NEW YORK	2,840	137	144	154	141	140	103	118	111	1,775	17
NORTH CAROLINA	1,890	122	106	90	90	82	81	69	64	1,182	4
NORTH DAKOTA	200	18	13	7	11	11	7	10	6	114	3

SEE FOOTNOTES AT END OF TABLE.

FATAL

DRIVERS INVOLVED IN ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1975

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
ACCIDENT STATE											
OHIO................	2,296	190	132	124	121	97	94	79	66	1,392	1
OKLAHOMA............	992	100	44	41	31	42	38	29	31	636	-
OREGON..............	694	62	23	51	30	28	21	27	24	426	2
PENNSYLVANIA........	2,661	169	123	147	138	112	105	105	106	1,642	14
RHODE ISLAND........	131	16	12	6	6	4	7	4	4	72	-
SOUTH CAROLINA......	999	71	41	36	46	50	47	37	32	633	6
SOUTH DAKOTA........	224	27	17	14	9	14	7	11	6	119	-
TENNESSEE...........	1,397	112	85	77	61	69	39	42	52	858	2
TEXAS...............	4,029	273	184	198	187	185	161	139	118	2,575	9
UTAH................	332	34	12	22	9	20	15	16	13	188	3
VERMONT.............	148	11	9	9	11	7	5	7	5	83	1
VIRGINIA............	1,191	86	54	78	68	53	53	33	39	723	4
WASHINGTON..........	930	79	58	54	40	38	44	47	33	536	1
WEST VIRGINIA.......	556	33	22	23	36	32	15	16	20	356	3
WISCONSIN...........	1,164	102	70	76	77	57	47	46	34	655	-
WYOMING.............	217	21	10	14	12	10	11	11	10	118	-

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1976

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
TOTAL...............	55,697	4,248	2,923	2,867	2,613	2,533	2,345	2,110	1,894	34,043	121
ACCIDENT STATE											
ALABAMA.............	1,190	91	47	46	45	47	47	42	29	794	2
ALASKA..............	146	10	5	5	12	9	5	8	7	85	-
ARIZONA.............	872	53	44	35	34	45	32	38	30	558	3
ARKANSAS............	641	42	36	19	27	31	22	27	17	420	-
CALIFORNIA..........	5,440	380	272	281	238	269	234	246	197	3,310	13
COLORADO............	713	58	36	35	26	28	43	24	29	432	2
CONNECTICUT.........	508	43	34	34	17	23	25	20	21	291	-
DELAWARE............	150	10	6	13	11	8	7	4	5	86	-
DISTRICT OF COLUMBIA	64	4	-	2	-	1	1	4	6	46	-
FLORIDA.............	2,394	170	107	81	114	93	81	94	82	1,568	4
GEORGIA.............	1,596	133	75	87	79	82	60	60	49	961	10
HAWAII..............	188	7	12	11	8	7	6	9	15	113	-
IDAHO...............	306	34	24	13	19	10	21	13	10	159	3
ILLINOIS............	2,571	194	112	147	125	113	105	109	87	1,576	3
INDIANA.............	1,568	114	76	86	67	80	75	59	49	961	1
IOWA................	942	106	45	52	47	50	45	25	30	542	-
KANSAS..............	650	76	35	39	26	28	26	36	21	362	1
KENTUCKY............	1,052	72	57	62	47	47	41	54	40	628	4
LOUISIANA...........	1,149	87	64	47	58	49	40	54	44	706	-
MAINE...............	268	27	19	12	9	14	20	9	6	152	-
MARYLAND............	783	62	34	38	36	37	33	30	31	482	-
MASSACHUSETTS.......	929	73	53	61	59	57	50	41	28	507	-
MICHIGAN............	2,534	202	156	150	120	119	112	93	92	1,490	-
MINNESOTA...........	988	80	74	63	50	45	56	32	40	548	-
MISSISSIPPI.........	693	53	29	29	29	23	28	19	27	451	5
MISSOURI............	1,445	127	78	81	65	50	51	39	47	907	-
MONTANA.............	322	29	15	14	21	18	10	8	10	197	-
NEBRASKA............	481	41	24	26	19	15	26	23	9	298	-
NEVADA..............	246	19	14	8	8	11	10	3	12	161	-
NEW HAMPSHIRE.......	188	19	13	22	9	9	10	5	3	98	-
NEW JERSEY..........	1,289	79	73	70	60	48	45	53	41	817	3
NEW MEXICO..........	606	57	25	26	27	31	31	28	27	353	1
NEW YORK............	2,776	147	144	141	130	97	113	95	95	1,797	17
NORTH CAROLINA......	1,809	131	91	103	94	75	84	74	58	1,093	6
NORTH DAKOTA........	214	28	12	8	7	13	5	4	6	130	1

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1976

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
ACCIDENT STATE											
OHIO................	2,389	177	145	127	98	128	98	89	75	1,449	3
OKLAHOMA............	1,036	95	45	42	45	50	37	23	30	639	-
OREGON..............	778	74	36	38	27	34	24	27	35	482	1
PENNSYLVANIA........	2,502	185	116	126	112	131	101	88	84	1,552	7
RHODE ISLAND........	153	7	10	11	9	11	13	7	5	80	-
SOUTH CAROLINA......	954	76	41	42	46	31	38	37	42	598	3
SOUTH DAKOTA........	260	34	17	10	8	9	8	16	10	146	2
TENNESSEE...........	1,462	119	69	70	64	72	57	48	44	914	5
TEXAS...............	3,823	273	204	214	209	153	170	124	122	2,344	10
UTAH................	309	31	21	14	14	25	15	12	13	161	3
VERMONT.............	135	12	9	5	11	7	4	7	6	72	2
VIRGINIA............	1,191	100	76	54	66	55	57	37	34	711	1
WASHINGTON..........	977	69	55	51	46	38	36	35	29	617	1
WEST VIRGINIA.......	601	28	34	39	33	33	24	25	17	365	3
WISCONSIN...........	1,182	95	92	64	66	59	50	42	38	676	-
WYOMING.............	264	15	12	13	16	15	13	11	10	158	1

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1977

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
TOTAL................	60,048	4,611	3,039	3,158	2,917	2,772	2,650	2,354	2,115	36,290	142
ACCIDENT STATE											
ALABAMA..............	1,385	110	62	72	47	54	69	46	48	875	2
ALASKA...............	177	20	8	13	11	7	6	7	8	96	1
ARIZONA..............	1,059	82	39	54	56	49	60	38	32	630	19
ARKANSAS.............	700	54	30	33	31	28	24	26	24	450	-
CALIFORNIA...........	6,192	439	320	352	293	340	326	248	248	3,607	19
COLORADO.............	823	68	47	26	31	35	39	47	30	500	-
CONNECTICUT..........	594	49	38	23	32	31	25	19	14	363	-
DELAWARE.............	159	8	4	6	9	10	3	6	1	111	1
DISTRICT OF COLUMBIA	76	2	3	2	1	7	-	5	2	54	-
FLORIDA..............	2,565	173	117	117	102	94	108	98	77	1,673	6
GEORGIA..............	1,715	148	65	84	72	64	68	62	52	1,089	11
HAWAII...............	191	11	2	8	10	12	9	9	8	122	-
IDAHO................	350	42	20	16	17	18	15	12	9	199	2
ILLINOIS.............	2,779	190	151	149	131	144	115	110	107	1,677	5
INDIANA..............	1,602	134	79	79	72	68	72	59	51	986	2
IOWA.................	784	70	48	42	38	33	41	33	20	459	-
KANSAS...............	697	72	40	39	38	36	26	26	29	390	1
KENTUCKY.............	1,143	104	58	63	39	45	55	34	36	704	5
LOUISIANA............	1,251	86	64	56	60	43	50	51	47	794	-
MAINE................	253	15	25	16	14	12	16	7	7	141	-
MARYLAND.............	804	54	46	29	45	33	44	29	37	483	4
MASSACHUSETTS........	894	72	62	57	54	62	49	43	38	457	-
MICHIGAN.............	2,596	195	155	183	139	107	90	96	92	1,539	-
MINNESOTA............	1,034	96	67	70	58	45	50	54	27	566	1
MISSISSIPPI..........	844	72	31	28	28	43	38	26	27	543	8
MISSOURI.............	1,475	135	57	71	68	59	56	52	49	928	-
MONTANA..............	335	42	22	18	21	16	14	12	8	181	1
NEBRASKA.............	438	37	24	24	25	27	18	15	14	252	2
NEVADA...............	284	19	24	10	11	8	7	9	12	184	-
NEW HAMPSHIRE........	191	24	13	12	12	11	9	6	11	93	-
NEW JERSEY...........	1,396	90	78	81	66	55	54	55	54	861	2
NEW MEXICO........ ..	763	60	45	41	33	30	38	27	36	451	2
NEW YORK.............	2,899	173	127	166	144	122	141	101	104	1,802	19
NORTH CAROLINA.......	1,747	145	69	95	94	81	69	80	60	1,051	3
NORTH DAKOTA.........	218	25	11	7	18	11	13	7	5	120	1

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1977

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
ACCIDENT STATE											
OHIO..................	2,372	188	110	134	134	114	109	84	83	1,415	1
OKLAHOMA..............	1,101	103	56	59	50	52	47	27	45	661	1
OREGON................	817	57	46	40	48	40	35	44	26	481	-
PENNSYLVANIA..........	2,685	171	132	138	134	121	110	116	103	1,651	9
RHODE ISLAND..........	155	10	8	8	13	11	5	7	2	91	-
SOUTH CAROLINA........	1,100	84	54	55	47	53	44	38	42	683	-
SOUTH DAKOTA..........	240	30	11	8	9	13	11	9	8	141	-
TENNESSEE.............	1,572	133	76	72	61	71	59	65	48	986	1
TEXAS.................	4,461	349	212	228	213	195	188	191	160	2,715	10
UTAH..................	407	30	21	15	21	18	20	23	20	239	-
VERMONT...............	141	7	10	9	8	4	13	2	3	85	-
VIRGINIA..............	1,369	83	80	83	69	62	57	56	42	836	1
WASHINGTON............	1,141	95	44	57	65	67	54	49	39	670	1
WEST VIRGINIA.........	647	38	31	34	34	42	29	30	17	392	-
WISCONSIN.............	1,144	101	79	62	75	51	45	41	39	650	1
WYOMING...............	283	16	18	14	16	18	7	17	14	163	-

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1978

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
TOTAL..............	63,600	4,655	3,243	3,268	3,157	3,012	2,751	2,444	2,293	38,626	151
ACCIDENT STATE											
ALABAMA............	1,432	96	64	55	60	50	51	56	41	959	-
ALASKA.............	157	14	10	11	10	10	11	8	3	79	1
ARIZONA............	1,286	86	56	79	71	48	55	46	52	772	21
ARKANSAS...........	721	58	41	32	26	25	32	19	28	459	1
CALIFORNIA.........	6,766	398	336	350	329	331	350	279	234	4,149	10
COLORADO...........	840	52	41	35	44	39	35	38	41	514	1
CONNECTICUT........	583	45	34	43	50	30	37	26	13	305	-
DELAWARE...........	156	16	6	7	14	6	4	7	2	93	1
DISTRICT OF COLUMBIA	64	5	1	3	-	-	1	2	1	51	-
FLORIDA............	2,886	197	160	106	130	116	103	100	96	1,859	19
GEORGIA............	1,829	131	80	95	81	69	88	59	51	1,167	8
HAWAII.............	240	20	5	17	7	13	15	14	6	143	-
IDAHO..............	379	34	16	16	15	20	22	12	15	229	-
ILLINOIS...........	2,816	207	154	156	158	148	124	101	100	1,658	10
INDIANA............	1,651	128	92	74	84	91	65	60	68	986	3
IOWA...............	825	75	53	46	38	38	46	26	31	472	-
KANSAS.............	745	62	42	41	32	34	35	24	27	446	2
KENTUCKY...........	1,129	100	49	62	52	42	51	29	38	705	1
LOUISIANA..........	1,322	94	75	69	68	70	57	51	50	782	6
MAINE..............	266	15	16	22	26	19	8	6	15	139	-
MARYLAND...........	872	52	57	21	55	46	37	46	21	537	-
MASSACHUSETTS......	1,038	94	65	80	57	66	59	51	39	526	1
MICHIGAN...........	2,679	202	125	115	153	137	111	90	95	1,650	1
MINNESOTA..........	1,224	98	63	92	75	52	48	40	53	701	2
MISSISSIPPI........	994	66	54	58	44	39	36	31	30	618	18
MISSOURI...........	1,508	124	67	81	77	64	58	53	54	929	1
MONTANA............	308	18	13	16	16	11	9	8	18	199	-
NEBRASKA...........	427	46	23	30	17	20	19	14	18	240	-
NEVADA.............	379	28	10	20	15	16	17	21	13	239	-
NEW HAMPSHIRE......	224	27	12	15	9	19	11	10	7	114	-
NEW JERSEY.........	1,481	86	71	77	74	76	60	49	58	928	2
NEW MEXICO.........	784	64	38	28	36	40	24	36	37	481	-
NEW YORK...........	3,021	146	142	166	138	141	136	120	93	1,928	11
NORTH CAROLINA.....	1,884	118	72	100	85	102	82	74	78	1,172	1
NORTH DAKOTA.......	209	22	11	12	12	9	12	9	5	117	-

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1978

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
ACCIDENT STATE											
OHIO	2,617	211	138	135	142	153	109	91	107	1,529	2
OKLAHOMA	1,103	103	53	49	46	48	51	43	41	669	-
OREGON	897	76	44	59	44	42	20	33	34	543	2
PENNSYLVANIA	2,736	190	155	155	141	124	112	103	97	1,657	2
RHODE ISLAND	124	9	8	14	4	15	5	8	3	58	-
SOUTH CAROLINA	1,082	103	61	43	39	49	39	38	42	668	-
SOUTH DAKOTA	239	23	14	6	10	11	9	9	6	148	3
TENNESSEE	1,590	112	85	67	73	77	57	73	58	987	1
TEXAS	4,774	362	255	223	220	220	189	190	180	2,928	7
UTAH	472	44	23	25	21	15	23	28	17	272	4
VERMONT	140	16	7	7	13	12	8	6	6	64	1
VIRGINIA	1,366	95	59	69	88	59	73	44	42	832	5
WASHINGTON	1,251	120	58	67	55	58	57	65	47	723	1
WEST VIRGINIA	577	40	31	30	19	27	20	28	24	357	1
WISCONSIN	1,229	106	88	74	66	57	60	57	44	676	1
WYOMING	278	21	10	15	18	8	10	13	14	169	-

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1979

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
TOTAL..............	64,231	4,536	3,327	3,262	2,920	3,000	2,794	2,607	2,388	39,228	169
ACCIDENT STATE											
ALABAMA..............	1,297	120	58	51	52	48	59	51	52	805	1
ALASKA..............	109	11	8	3	9	3	3	6	2	64	-
ARIZONA..............	1,242	79	66	85	61	66	50	32	55	726	22
ARKANSAS..............	691	56	34	35	27	21	21	23	15	459	-
CALIFORNIA..............	7,080	476	362	348	338	337	333	278	278	4,319	11
COLORADO..............	865	58	47	32	42	45	52	45	35	509	-
CONNECTICUT..............	712	54	48	46	36	49	26	28	25	400	-
DELAWARE..............	159	8	8	3	7	5	6	11	9	102	-
DISTRICT OF COLUMBIA	56	1	1	3	1	2	2	2	1	43	-
FLORIDA..............	3,245	215	157	157	129	139	120	110	98	2,095	25
GEORGIA..............	1,908	150	100	93	72	72	68	69	82	1,192	10
HAWAII..............	248	14	13	6	19	12	15	11	10	148	-
IDAHO..............	385	37	16	25	14	15	10	17	10	241	-
ILLINOIS..............	2,643	155	116	135	127	136	149	119	113	1,575	18
INDIANA..............	1,694	142	75	75	82	70	74	61	73	1,039	3
IOWA..............	853	95	47	50	42	46	31	32	22	488	-
KANSAS..............	655	66	33	27	40	35	37	28	22	366	1
KENTUCKY..............	1,142	100	66	58	45	36	49	54	39	695	-
LOUISIANA..............	1,485	97	71	63	57	73	66	74	65	908	11
MAINE..............	266	18	20	16	15	15	12	9	15	145	1
MARYLAND..............	843	31	48	44	36	43	43	33	33	532	-
MASSACHUSETTS..............	1,153	89	81	76	69	67	61	46	36	627	1
MICHIGAN..............	2,421	179	119	122	108	113	93	101	83	1,501	2
MINNESOTA..............	1,139	81	74	76	59	54	49	42	36	667	1
MISSISSIPPI..............	892	59	31	32	32	41	39	38	30	584	6
MISSOURI..............	1,434	129	72	63	58	62	47	62	65	876	-
MONTANA..............	373	39	17	26	13	20	15	13	17	212	1
NEBRASKA..............	429	49	14	24	23	12	20	7	16	263	1
NEVADA..............	414	26	10	25	19	17	24	19	22	252	-
NEW HAMPSHIRE..............	217	28	12	12	9	12	6	12	11	115	-
NEW JERSEY..............	1,458	76	78	77	77	56	58	50	38	947	1
NEW MEXICO..............	717	65	35	33	30	33	35	28	28	424	6
NEW YORK..............	3,030	153	172	159	142	150	133	133	118	1,855	15
NORTH CAROLINA..............	1,921	145	87	94	65	88	82	75	69	1,216	-
NORTH DAKOTA..............	164	10	8	11	8	12	10	6	3	96	-

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1979

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
ACCIDENT STATE											
OHIO................	2,838	214	154	154	137	126	149	123	101	1,679	1
OKLAHOMA............	1,083	93	53	54	40	46	43	53	28	673	-
OREGON..............	830	48	44	25	39	50	37	33	28	524	2
PENNSYLVANIA........	2,745	145	160	136	131	150	106	124	100	1,688	5
RHODE ISLAND........	145	20	11	7	9	5	5	9	4	75	-
SOUTH CAROLINA......	1,113	80	58	37	44	50	48	49	38	709	-
SOUTH DAKOTA........	250	24	19	11	9	6	10	13	9	147	2
TENNESSEE...........	1,550	114	72	85	74	76	56	66	63	943	1
TEXAS...............	5,050	327	279	269	233	218	216	175	182	3,137	14
UTAH................	388	38	21	14	20	18	24	16	16	220	1
VERMONT.............	176	12	6	7	11	14	10	5	6	105	-
VIRGINIA............	1,266	69	54	67	74	51	58	46	55	788	4
WASHINGTON..........	1,281	99	56	70	43	70	48	65	46	782	2
WEST VIRGINIA.......	615	28	32	31	25	30	33	28	25	383	-
WISCONSIN...........	1,295	104	94	95	59	73	38	65	51	716	-
WYOMING.............	266	10	10	15	9	12	15	12	10	173	-

SEE FOOTNOTES AT END OF TABLE.

FATAL

DRIVERS INVOLVED IN ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1980

	TOTAL	AGE GROUP								
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
TOTAL...............	62,957	4,226	2,883	3,216	2,963	2,806	2,774	2,625	2,369	38,937	158
ACCIDENT STATE											
ALABAMA.............	1,187	82	42	39	56	49	56	38	54	770	1
ALASKA..............	106	7	5	2	5	10	5	8	6	58	-
ARIZONA.............	1,146	48	43	49	50	42	60	55	36	752	11
ARKANSAS............	661	56	22	37	36	28	23	23	22	414	-
CALIFORNIA..........	6,890	408	315	322	314	298	317	298	283	4,321	14
COLORADO............	844	62	35	40	35	31	36	35	24	546	-
CONNECTICUT.........	732	52	48	37	43	38	38	29	22	425	-
DELAWARE............	202	16	14	9	12	12	10	10	5	114	-
DISTRICT OF COLUMBIA	53	1	4	1	1	1	1	1	3	40	-
FLORIDA.............	3,490	231	158	161	143	134	149	122	129	2,249	14
GEORGIA.............	1,890	154	72	91	81	84	77	80	60	1,184	7
HAWAII..............	224	16	11	9	11	8	12	6	10	141	-
IDAHO...............	414	44	24	17	19	12	9	15	10	264	-
ILLINOIS............	2,547	165	105	123	108	107	120	122	88	1,589	20
INDIANA.............	1,451	102	68	73	63	79	60	56	64	884	2
IOWA................	793	69	48	33	55	33	43	31	34	446	1
KANSAS..............	723	45	36	45	38	39	27	29	23	438	3
KENTUCKY............	1,029	72	35	59	43	45	49	45	45	635	1
LOUISIANA...........	1,559	89	75	101	79	81	76	62	75	919	2
MAINE...............	304	27	18	28	22	13	14	9	9	164	-
MARYLAND............	907	50	38	50	40	43	34	36	41	572	3
MASSACHUSETTS.......	1,084	71	64	64	71	60	59	50	48	597	-
MICHIGAN............	2,247	161	96	115	119	117	103	103	89	1,343	1
MINNESOTA...........	1,061	84	57	73	65	51	48	47	45	591	-
MISSISSIPPI.........	868	51	30	35	34	45	36	35	33	561	8
MISSOURI............	1,409	133	62	88	54	61	70	52	35	852	2
MONTANA.............	357	34	14	18	26	8	13	11	9	224	-
NEBRASKA............	492	43	26	24	19	28	17	17	15	303	-
NEVADA..............	415	30	14	21	18	11	12	17	17	274	1
NEW HAMPSHIRE.......	229	16	17	16	16	13	7	12	10	122	-
NEW JERSEY..........	1,409	74	77	84	73	70	59	54	46	871	1
NEW MEXICO..........	689	64	21	27	26	41	27	28	24	426	5
NEW YORK............	3,144	154	148	169	152	151	159	113	103	1,974	21
NORTH CAROLINA......	1,826	138	87	100	89	61	78	73	71	1,127	2
NORTH DAKOTA........	180	17	13	4	4	9	11	7	12	99	-

SEE FOOTNOTES AT END OF TABLE.

FATAL

DRIVERS INVOLVED IN ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1980

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
ACCIDENT STATE											
OHIO................	2,530	169	130	123	105	109	118	116	92	1,566	2
OKLAHOMA............	1,167	90	59	67	46	60	55	38	32	720	-
OREGON..............	814	46	39	35	32	31	29	38	23	541	-
PENNSYLVANIA........	2,619	144	91	145	134	118	126	129	92	1,637	3
RHODE ISLAND........	150	5	12	9	11	7	14	9	2	91	-
SOUTH CAROLINA......	1,022	81	34	34	53	29	39	35	47	669	1
SOUTH DAKOTA........	263	31	9	7	12	15	12	10	8	157	2
TENNESSEE...........	1,432	95	62	79	56	55	59	64	56	903	3
TEXAS...............	5,228	327	237	253	248	223	198	230	220	3,270	22
UTAH................	404	38	23	14	18	14	21	14	12	250	-
VERMONT.............	161	14	12	7	7	8	2	8	8	94	1
VIRGINIA............	1,265	87	68	73	51	48	48	66	50	772	2
WASHINGTON..........	1,292	94	51	67	51	69	49	54	54	713	-
WEST VIRGINIA.......	640	34	27	34	36	39	23	26	20	400	1
WISCONSIN...........	1,209	86	75	84	68	54	55	45	46	695	1
WYOMING.............	279	19	12	17	15	14	11	14	7	170	-

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1981

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
TOTAL..............	62,154	3,790	2,698	2,796	2,832	2,734	2,550	2,545	2,365	39,409	435
ACCIDENT STATE											
ALABAMA............	1,141	83	41	48	48	35	37	42	39	768	-
ALASKA.............	117	4	11	3	5	9	3	6	5	70	1
ARIZONA............	1,175	59	49	48	51	52	44	60	40	763	9
ARKANSAS...........	685	64	25	36	22	29	19	17	27	446	-
CALIFORNIA.........	6,572	357	278	266	281	297	299	273	260	4,225	16
COLORADO...........	938	45	31	41	50	36	53	49	49	584	-
CONNECTICUT........	697	45	40	36	36	33	31	37	26	413	-
DELAWARE...........	151	5	4	11	9	2	2	9	7	102	-
DISTRICT OF COLUMBIA	67	1	1	-	6	3	4	2	3	47	-
FLORIDA............	4,052	216	120	167	157	162	136	129	125	2,527	313
GEORGIA............	1,776	131	96	69	74	72	68	73	62	1,122	9
HAWAII.............	184	10	6	11	11	12	11	5	7	111	-
IDAHO..............	362	23	7	19	17	14	17	14	9	242	-
ILLINOIS...........	2,386	144	93	109	103	100	112	115	86	1,517	7
INDIANA............	1,449	104	47	62	57	56	66	68	63	921	5
IOWA...............	780	68	41	39	37	27	36	22	32	478	-
KANSAS.............	733	57	44	34	29	31	25	28	28	457	-
KENTUCKY...........	1,026	82	57	48	51	33	32	38	45	637	3
LOUISIANA..........	1,581	100	81	77	73	81	69	79	55	961	5
MAINE..............	252	14	14	10	20	10	18	10	12	144	-
MARYLAND...........	944	41	38	32	52	45	10	80	29	613	4
MASSACHUSETTS......	907	58	44	49	53	56	60	46	24	517	-
MICHIGAN...........	2,103	139	92	70	93	96	74	65	87	1,387	-
MINNESOTA..........	945	72	48	52	42	43	45	40	37	565	1
MISSISSIPPI........	893	53	38	35	38	42	29	33	40	579	6
MISSOURI...........	1,309	89	55	68	61	54	44	37	46	855	-
MONTANA............	366	20	19	19	16	10	12	18	17	235	-
NEBRASKA...........	467	34	16	29	27	18	13	17	16	297	-
NEVADA.............	351	17	14	16	10	20	15	16	7	235	1
NEW HAMPSHIRE......	181	12	6	12	10	9	14	8	8	102	-
NEW JERSEY.........	1,482	77	72	72	72	78	50	61	49	943	8
NEW MEXICO.........	594	38	26	22	23	29	31	23	23	375	4
NEW YORK...........	3,953	138	136	147	163	119	144	114	125	1,954	13
NORTH CAROLINA.....	1,817	114	82	83	100	73	77	71	64	1,151	2
NORTH DAKOTA.......	210	17	8	7	15	9	10	9	8	127	-

SEE FOOTNOTES AT END OF TABLE.

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1975-1981-CONTINUED

1981

	TOTAL	AGE GROUP								
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
ACCIDENT STATE											
OHIO..................	2,299	150	93	94	93	121	106	108	86	1,445	3
OKLAHOMA..............	1,277	90	65	56	63	64	38	48	47	804	2
OREGON................	812	50	31	26	28	31	36	33	30	547	-
PENNSYLVANIA..........	2,592	137	122	115	115	114	105	95	100	1,685	4
RHODE ISLAND..........	146	9	9	6	8	5	7	6	8	87	1
SOUTH CAROLINA........	1,060	65	42	43	45	40	45	42	46	692	-
SOUTH DAKOTA..........	204	22	9	10	12	14	10	8	3	115	1
TENNESSEE.............	1,372	109	59	76	65	60	36	41	44	882	-
TEXAS.................	5,778	329	260	275	250	251	226	250	225	3,698	14
UTAH..................	436	23	17	18	23	17	19	17	17	285	-
VERMONT...............	126	7	8	7	4	11	8	8	5	68	-
VIRGINIA..............	1,256	81	51	56	65	56	51	46	51	797	2
WASHINGTON............	1,111	81	54	43	49	48	49	40	49	698	-
WEST VIRGINIA.........	496	17	17	24	17	27	27	31	25	311	-
WISCONSIN.............	1,143	74	73	61	64	67	60	48	50	645	1
WYOMING...............	300	15	8	19	19	13	17	10	19	180	-

- EITHER ZERO (0) OR DATA NOT AVAILABLE

DRIVERS INVOLVED IN FATAL ACCIDENT BY STATE AND AGE
FARS FILE FOR 1982 - SUB127(4 FEB 84)

1982

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
TOTAL...............	56,029	3,082	2,282	2,515	2,391	2,495	2,386	2,144	1,993	35,586	1,155
ACCIDENT STATE											
ALABAMA.............	1,046	49	43	53	40	48	44	23	37	700	9
ALASKA..............	143	5	4	9	8	7	6	5	6	91	2
ARIZONA.............	915	37	32	38	38	45	48	33	33	581	30
ARKANSAS............	682	42	28	30	18	24	29	24	22	465	-
CALIFORNIA..........	5,914	272	228	235	256	305	262	244	213	3,716	183
COLORADO............	817	38	30	39	30	53	23	32	32	529	11
CONNECTICUT.........	678	43	24	49	31	34	34	28	27	401	7
DELAWARE............	171	5	5	10	11	12	12	7	7	101	1
DISTRICT OF COLUMBIA	50	2	-	-	2	3	1	-	2	38	2
FLORIDA.............	3,564	176	110	149	134	131	136	115	115	2,367	131
GEORGIA.............	1,614	111	46	57	58	61	66	70	46	1,077	22
HAWAII..............	200	4	10	7	9	11	6	6	9	135	3
IDAHO...............	287	33	10	16	23	10	10	11	9	162	3
ILLINOIS............	2,131	108	90	91	94	76	89	102	78	1,337	66
INDIANA.............	1,269	72	49	49	63	55	51	54	51	807	18
IOWA................	622	67	27	25	25	15	30	30	18	379	6
KANSAS..............	646	31	27	33	28	29	24	29	35	405	5
KENTUCKY............	1,015	72	48	38	36	48	49	52	36	625	11
LOUISIANA...........	1,407	64	58	86	62	77	79	46	49	833	53
MAINE...............	208	14	8	11	10	7	5	5	7	141	-
MARYLAND............	832	27	39	32	45	39	27	35	16	561	11
MASSACHUSETTS.......	831	67	35	50	34	49	33	34	32	479	18
MICHIGAN............	1,879	109	81	76	76	86	69	59	63	1,219	41
MINNESOTA...........	759	37	33	30	42	29	43	17	22	498	8
MISSISSIPPI.........	892	51	29	28	33	41	37	32	26	596	19
MISSOURI............	1,141	83	56	49	38	50	41	47	47	718	12
MONTANA.............	299	18	13	17	10	14	20	20	13	173	1
NEBRASKA............	342	34	12	12	17	11	13	10	12	219	2
NEVADA..............	335	10	14	15	12	9	18	20	10	224	3
NEW HAMPSHIRE.......	223	14	12	12	9	15	10	6	8	136	1
NEW JERSEY..........	1,369	65	57	66	54	74	66	46	51	858	32
NEW MEXICO..........	660	37	29	25	28	31	37	25	25	410	13
NEW YORK............	2,687	101	123	124	130	104	119	90	105	1,698	93
NORTH CAROLINA......	1,655	102	75	77	75	72	64	51	50	1,067	22
NORTH DAKOTA........	192	16	11	10	12	9	7	10	7	110	-

SEE FOOTNOTES AT END OF TABLE.

RIVERS INVOLVED IN ACCIDENT BY STATE AND AGE
ARS FILE FOR 1982 - SUB127(4 FEB 84)-CONTINUED

1982

	TOTAL	AGE GROUP									
		17 & YOUNGER	18	19	20	21	22	23	24	25 & OLDER	UNKNOWN
ACCIDENT STATE											
OHIO...............	2,045	115	92	102	78	81	91	75	72	1,308	31
OKLAHOMA...........	1,402	79	53	65	58	52	48	59	57	913	18
OREGON.............	653	35	22	26	24	29	31	19	14	447	6
PENNSYLVANIA.......	2,368	130	101	95	97	113	105	86	90	1,525	26
RHODE ISLAND.......	128	5	8	10	5	4	7	6	6	72	5
SOUTH CAROLINA.....	937	66	37	34	24	35	44	39	22	616	20
SOUTH DAKOTA.......	180	9	6	8	9	10	1	6	12	119	-
TENNESSEE..........	1,336	89	62	73	58	59	39	68	39	835	14
TEXAS..............	5,177	269	199	242	231	233	237	202	210	3,192	162
UTAH...............	371	21	16	17	19	18	12	9	20	239	-
VERMONT............	121	10	10	6	6	2	8	2	4	72	1
VIRGINIA...........	1,114	71	48	53	60	49	51	40	31	698	13
WASHINGTON.........	950	48	44	47	48	36	30	33	30	625	9
WEST VIRGINIA......	547	37	19	33	21	22	27	25	21	340	2
WISCONSIN..........	991	71	60	49	49	58	40	45	37	576	6
WYOMING............	234	11	9	7	13	10	7	12	9	153	3

- EITHER ZERO (0) OR DATA NOT AVAILABLE

SECTION 5.

MONTANA
Estimated Consumption of Taxed Alcoholic Beverages
U.S. Gallons Per Person
Population 18 and older (1975 - 1982)

Year	Gallons & (Rank) Distilled Spirits		Gallons & (Rank) Wine		Gallons & (Rank) Beer		Overall Consumption Rank in U.S.
1975	3.20	(24)	1.92	(36)	35.2	(7)	(17)
1976	3.10	(24)	2.00	(30)	36.0	(4)	(12)
1977	3.23	(20)	2.17	(31)	36.4	(5)	(11)
1978	3.20	(23)	2.00	(29)	42.6	(4)	(12)
1979	2.85	(27)	3.92	(12)	50.2	(1)	(5)
1980	2.85	(28)	3.25	(18)	44.6	(5)	(12)
1981	N/A		N/A		N/A		(12)
1982	2.55	(24)	2.67	(23)	36.4	(5)	(13)

Source: National Status Reports, published by National Institute of Alcohol Abuse and Alcoholism; 5600 Fishers Lane; Rockville, MD 20857

SECTION 6.

The data on alcohol related accidents in Tables 1, 2, and 3 is available for 1978-1983 only. It would be desirable to have data before 1975. This data would show whether any changes occurred when the legal minimum purchasing age was lowered from 21 to 18. The next best analysis would be to look at all accidents. Since alcohol accidents account for a large percentage of accidents, even all accidents would likely show a change if one exists. However in the case of Montana, no change was obvious as shown in Table 4.

Table 1

MONTANA
FATAL ALCOHOL RELATED ACCIDENTS
(Accidents with at least one driver or pedestrian who had been drinking)

Percentage of Drivers Involved By Age

Year	18 & Under	19-20	21-24	25-34	35-44	45-54	55-64	65+	Unknown	Total
1978	8.4	12.9	14.5	30.7	12.3	12.3	5.0	3.9	0.0	100.0
1979	7.6	16.3	24.4	24.4	15.1	5.2	3.5	2.3	1.2	100.0
1980	10.8	16.9	11.7	33.8	13.1	3.8	6.1	3.8	0.0	100.0
1981	11.7	12.1	17.8	28.6	14.7	9.5	3.9	1.7	0.0	100.0
1982	12.0	9.1	25.2	28.6	9.7	8.6	3.4	3.4	0.0	100.0
1983	5.8	11.1	23.3	27.0	18.0	7.9	4.8	2.1	0.0	100.0

Counts of Drivers Involved By Age

Year	18 & Under	19-20	21-24	25-34	35-44	45-54	55-64	65+	Unknown	Total
1978	15	23	26	55	22	22	9	7	0	179
1979	13	28	42	42	26	9	6	4	2	172
1980	23	36	25	72	28	8	13	8	0	213
1981	27	28	41	66	34	22	9	4	0	231
1982	21	16	44	50	17	15	6	6	0	175
1983	11	21	44	51	34	15	9	4	0	189

Source: State of Montana Highway Information System

Table 2

MONTANA
ALL ALCOHOL RELATED ACCIDENTS
(Accidents with at least one driver or pedestrian who had been drinking)

Percentage of Drivers Involved By Age

Year	18 & Under	19-20	21-24	25-34	35-44	45-54	55-64	65+	Unknown	Total
1978	15.8	13.7	19.6	24.1	11.8	8.0	4.5	2.3	0.2	100.0
1979	14.7	14.2	19.1	26.1	12.4	6.8	4.5	1.9	0.3	100.0
1980	14.7	13.9	19.3	27.3	12.2	6.5	3.9	2.0	0.2	100.0
1981	13.7	14.2	19.8	27.1	12.5	6.7	3.7	2.2	0.1	100.0
1982	12.8	13.1	19.6	28.5	12.7	6.8	4.5	1.8	0.2	100.0
1983	11.4	13.8	20.9	27.6	13.0	6.9	3.8	2.4	0.2	100.0

Counts of Drivers Involved By Age

Year	18 & Under	19-20	21-24	25-34	35-44	45-54	55-64	65+	Unknown	Total
1978	891	771	1111	1358	664	450	256	127	16	5644
1979	848	818	1096	1497	709	394	261	111	20	5754
1980	866	815	1133	1606	715	385	231	117	12	5880
1981	851	882	1230	1685	778	417	229	135	9	6216
1982	726	746	1117	1623	722	385	256	105	11	5691
1983	625	759	1148	1514	711	380	208	132	8	5485

Source: State of Montana Highway Information System

MONTANA

Accident Involvement for 18 Year Olds and Under Change and Comparison to Population by Year

Year	Percent Accident Involvement	Percent Change	Population-15-18 year olds	Percent Change
1978	15.8	-----	60551	-----
1979	14.7	- 7.0	60437	- 0.2
1980	14.7	- 7.0	59517	- 1.7
1981	13.7	-13.3	57477	- 5.1
1982	12.8	-19.0	54513	-10.0
1983	11.4	-27.8	51371	-15.2

Source: State of Montana Highway Information System

Table 4

ALL DRIVERS INVOLVED IN FATAL ACCIDENTS

(PERCENTAGE BY AGE GROUP)

	15-19	15-24	15	16	17	18-19	20-24	25-34	35-44	45-54	55-64	65-74	75+
1972	19.72	38.76	2.75	3.90	3.21	9.86	19.04	18.35	13.30	11.01	7.11	7.11	2.98
1973	16.67	36.07	2.46	2.46	2.73	9.02	19.40	22.13	12.30	13.93	9.29	3.55	2.73
1974	22.35	40.88	3.82	2.94	2.94	12.65	18.53	23.82	11.76	11.47	5.00	5.88	1.18
1975	18.51	35.22	2.69	3.28	2.09	10.45	16.72	22.99	14.03	10.45	9.55	4.18	3.28
1976	17.96	38.70	2.48	2.48	4.33	8.67	20.74	27.24	10.53	8.98	6.81	5.26	2.48
1977	25.36	46.06	3.79	3.79	6.12	11.66	20.70	21.57	13.70	7.58	3.80	3.50	3.50
1978	14.97	34.39	0.96	0.96	3.82	9.24	19.43	29.94	11.15	12.74	6.05	4.14	1.59
1979	22.46	43.05	1.60	3.74	5.35	11.76	20.59	22.73	13.90	8.56	5.35	4.55	1.34
1980	18.41	37.36	2.20	3.30	4.40	8.52	18.96	27.47	13.19	7.97	7.14	4.95	1.92
1981	15.99	36.31	1.63	2.17	2.17	10.03	20.33	29.81	14.36	8.67	5.15	3.79	1.90
1982	16.78	42.43	1.97	1.97	2.96	9.87	25.66	23.68	11.51	9.54	6.91	3.62	2[illegible]
1983	13.25	35.24	2.11	1.51	1.81	7.83	21.99	24.40	17.47	10.54	7.23	3.61	1.51
1972-1974*	19.58	38.57	3.01	3.10	2.96	10.51	18.99	21.43	12.45	12.14	7.13	5.51	2.30
1976-1978**	19.43	39.72	2.41	2.41	4.76	9.86	20.29	26.25	11.79	9.77	5.55	4.30	2.52
1979-1983***	17.38	38.88	1.90	2.54	3.34	9.60	21.51	25.62	14.09	9.06	6.36	4.10	1.79

* Legal drinking age at 21

** July 1, 1975, legal age changed from 21 to 18

*** January 1, 1979, legal age changed from 18 to 19

SECTION 7.

OTHER EFFORTS IN THE SUBJECT AREA

Presently, MADD, Montanan's Against Drunk Drivers is circulating petitions to place a constitutional amendment on the November 1984 ballot to raise the "legal drinking age from 19 to 21".

For further information contact: Mrs. Alice Morrison, President
MADD
222-1007 Livingston, MT

The YOUTH JUSTICE COUNCIL is conducting a review of jurisdictional issues of youth arrested for illegal possession and examining the sentencing alternatives.

For further information contact: Steve Nelson
Montana Board of Crime Control
Helena, MT 444-3604

SECTION 8.

ALTERNATIVES THAT COULD BE EXPLORED

* Develop a standard state-issued unalterable I.D. card that was accepted as the only proof of age for purchasing alcoholic beverages by all outlets licensed to sell.

* Make penalties for minors procuring and minors in possession of alcoholic beverages more stringent and MANDATORY.

* Require an educational course similar to the adult court school for those minors convicted of procuring or possession of alcoholic beverages. Attendance by the minor and his/her parents would be mandatory.

* Establish stronger controls on sale and distribution of alcoholic beverages. Example: records of keg sales.

* Limit retail distribution points and times.

* Allow minors to consume alcoholic beverages in eating establishments when accompanied by a parent or legal guardian.

* Limit advertising of beer and wine as was done with cigarettes and distilled spirits.

* Exert stronger restrictions on driver licensing of offenders. Additionally, do not issue temporary or provisional licenses to DUI offenders.

* Substantially increase and make MANDATORY, the fines for DUI. The additional revenue would be used by Highway Traffic Safety Division for mass media public information and education.

* Beginning in the elementary levels, establish a well defined in-school curriculum on alcohol education. Reinforcement would be followed in driver education courses. These courses could be funded through increased taxation on liquor sales.

* Prohibit consumption of alcoholic beverages in motor vehicles and prohibit possession of open alcoholic beverage containers in passenger compartments of motor vehicles.

* Make all DUI fines and punishments MANDATORY rather than discretionary.

* Judges now are unsure how much authority they have to enforce counseling recommendations for those DUI offenders who are alcoholic or chemically dependent. The DUI law needs to be clarified to support required counseling for those who need it.

* Classify the DUI offense that causes death or bodily injury as a felony rather than a misdemeanor.

* Impound the DUI offender's automobile for the same period of time as the driver license revocation and suspension on second and subsequent offenses.

SECTION 9.

Retail Sales Restrictions

16-3-301. Unlawful purchases, sales, or deliveries. (1) It shall be unlawful for a licensed retailer to purchase or acquire beer from anyone except a brewer or wholesaler licensed under the provisions of this code.

(2) It shall be unlawful for any licensee, his or her employee or employees, or any other person to sell, deliver, or give away or cause or permit to be sold, delivered, or given away any alcoholic beverage to:

(a) any person under 19 years of age;

(b) any intoxicated person or any person actually, apparently, or obviously intoxicated.

(3) Any person under 19 years of age or other person who knowingly misrepresents his or her qualifications for the purpose of obtaining an alcoholic beverage from such licensee shall be equally guilty with said licensee and shall, upon conviction thereof, be subject to the penalty provided in 45-5-624; provided, however, that nothing herein contained shall be construed as authorizing or permitting the sale of an alcoholic beverage to any person in violation of any federal law.

(4) It shall be further mandatory under the provisions of this code that all licensees display in a prominent place in their premises a placard as issued by the department stating fully the consequences for violations of the provisions of this code by persons under 19 years of age.

History: (1), (2)En. Sec. 31, Ch. 106, L. 1933; amd. Sec. 11, Ch. 46, Ex. L. 1933; re-en. Sec. 2815.33, R.C.M. 1935; amd. Sec. 7, Ch. 166, L. 1951; amd. Sec. 2, Ch. 240, L. 1971; amd. Sec. 3, Ch. 94, L. 1973; Sec. 4-330, R.C.M. 1947; amd. and redes. 4-3-301 by Sec. 64, Ch. 387, L. 1975; Sec. 4-3-301, R.C.M. 1947; (3)En. Sec. 11, Ch. 84, L. 1937; amd. Sec. 3, Ch. 221, L. 1939; amd. Sec. 1, Ch. 71, L. 1953; amd. Sec. 4, Ch. 240, L. 1971; amd. Sec. 5, Ch. 94, L. 1973; Sec. 4-413, R.C.M. 1947; amd. and redes. 4-3-306 by Sec. 91, Ch. 387, L. 1975; Sec. 4-3-306, R.C.M. 1947; (4)En. Sec. 38, Ch. 84, L. 1937; amd. Sec. 2, Ch. 226, L. 1947; amd. Sec. 1, Ch. 161, L. 1951; amd. Sec. 5, Ch. 240, L. 1971; amd. Sec. 6, Ch. 94, L. 1973; Sec. 4-439, R.C.M. 1947; amd. and redes. 4-6-404 by Sec. 104, Ch. 387, L. 1975; Sec. 4-6-404, R.C.M. 1947; R.C.M. 1947, 4-3-301, 4-3-306, 4-6-404(part); amd. Sec. 1, Ch. 186, L. 1979.

Cross-References

Liability for willful acts and negligence, 27-1-701.

Criminal offense — selling or giving alcoholic beverages to minors, 45-5-623.

16-6-304. Providing alcoholic beverage to intoxicated person prohibited. (1) No store manager, retail licensee, or any employee of a store manager or retail licensee may sell any alcoholic beverage or permit any alcoholic beverage to be sold to any person apparently under the influence of an alcoholic beverage.

(2) No person may give an alcoholic beverage to a person apparently under the influence of alcohol.

History: En. Sec. 55, Ch. 105, L. 1933; re-en. Sec. 2815.114, R.C.M. 1935; Sec. 4-160, R.C.M. 1947; amd. and redes. 4-6-103 by Sec. 23, Ch. 387, L. 1975; R.C.M. 1947, 4-6-103.

Cross-References

Unlawful to sell or give alcholic beverages — persons actually or apparently intoxicated, 16-3-301.

16-6-305. Age limit for sale of alcoholic beverages. (1) Except in the case of an alcoholic beverage given to a person under 19 years of age by his parent or guardian for beverage or medicinal purposes or administered to him by his physician or dentist for medicinal purposes or sold to him by a vendor or druggist upon the prescription of a physician, no person shall sell, give, or otherwise supply an alcoholic beverage to any person under 19 years of age or permit any person under that age to consume an alcoholic beverage.

(2) Any person shall be guilty of a misdemeanor who:

(a) invites a person under the age of 19 years into a public place where an alcoholic beverage is sold and treats, gives, or purchases an alcoholic beverage for such person;

(b) permits such person in a public place where an alcoholic beverage is sold to treat, give, or purchase liquor for him; or

(c) holds out such person to be 19 years of age or older to the owner of the establishment or his or her employee or employees.

(3) It is unlawful for any person to fraudulently misrepresent his or her age to any dispenser of alcoholic beverages or to falsely procure any identification card or to alter any of the statements contained in any identification card.

History: (1)En. Sec. 56, Ch. 105, L. 1933; re-en. Sec. 2815.115, R.C.M. 1935; amd. Sec. 1, Ch. 240, L. 1971; amd. Sec. 2, Ch. 94, L. 1973; Sec. 4-161, R.C.M. 1947; amd. and redes. 4-6-104 by Sec. 24, Ch. 387, L. 1975; Sec. 4-6-104, R.C.M. 1947; (2)En. Sec. 38, Ch. 84, L. 1937; amd. Sec. 2, Ch. 226, L. 1947; amd. Sec. 1, Ch. 161, L. 1951; amd. Sec. 5, Ch. 240, L. 1971; amd. Sec. 6, Ch. 94, L. 1973; Sec. 4-439, R.C.M. 1947; amd. and redes. 4-6-404 by Sec. 104, Ch. 387, L. 1975; Sec. 4-6-404, R.C.M. 1947; R.C.M. 1947, 4-6-104, 4-6-404(part); amd. Sec. 1, Ref. 74, app. Nov. 7, 1978; (3)En. Sec. 1, Ch. 26, L. 1979; amd. Sec. 4, Ch. 186, L. 1979.

Cross-References

Unlawful to sell or give alcoholic beverages — persons under 19 years old, 16-3-301.

Penalty, 16-6-314.

16-6-314. Penalty for violating code — revocation of license. Any person violating any of the provisions of this code shall, upon conviction thereof, be deemed guilty of a misdemeanor and punishable by such fine or imprisonment, or both, as provided in 46-18-212, except as is herein otherwise provided. If any retail licensee is convicted of any offense under this code, his license shall be immediately revoked or in the discretion of the department such other sanction imposed as may be authorized under 16-4-406. Further, if any person under 19 years of age is convicted of an offense under this code he shall be subject to a $100 fine or 30 days in confinement.

History: En. Sec. 38, Ch. 84, L. 1937; amd. Sec. 2, Ch. 226, L. 1947; amd. Sec. 1, Ch. 161, L. 1951; amd. Sec. 5, Ch. 240, L. 1971; amd. Sec. 6, Ch. 94, L. 1973; Sec. 4-439, R.C.M. 1947; amd. and redes. 4-6-404 by Sec. 104, Ch. 387, L. 1975; R.C.M. 1947, 4-6-404(part); amd. Sec. 5, Ch. 186, L. 1979.

Cross-References

Place of imprisonment when none specified — sentence for 1 year or less, 46-18-211.

Commutation of juvenile's sentence, transfer to juvenile correctional facility, 53-30-212.

Offenses Against the Family

45-5-623. Unlawful transactions with children. (1) A person commits the offense of unlawful transactions with children if he knowingly:

(a) sells or gives explosives to a child under the age of majority except as authorized under appropriate city ordinances;

(b) sells or gives intoxicating substances other than alcoholic beverages to a child under the age of majority;

(c) sells or gives alcoholic beverages to a person under 19 years of age; or

(d) being a junk dealer, pawnbroker, or secondhand dealer, receives or purchases goods from a child under the age of majority without authorization of the parent or guardian.

(2) A person convicted of the offense of unlawful transactions with children shall be fined not to exceed $500 or be imprisoned in the county jail for any term not to exceed 6 months, or both. A person convicted of a second offense of unlawful transactions with children shall be fined not to exceed $1,000 or be imprisoned in the county jail for any term not to exceed 6 months, or both.

History: En. 94-5-609 by Sec. 1, Ch. 513, L. 1973; R.C.M. 1947, 94-5-609; amd. Sec. 2, Ref. 74, app. Nov. 7, 1978.

Cross-References

Adult rights, Art. II, sec. 14, 1972 Mont. Const.

Definition of "intoxicating substance", 45-2-101(30).

Definition of "knowingly", 45-2-101(33).

45-5-624. Unlawful possession of an intoxicating substance by children. (1) A person under the age of 18 years commits the offense of possession of an intoxicating substance if he knowingly has in his possession an intoxicating substance other than an alcoholic beverage. A person under the age of 19 commits the offense of possession of an intoxicating substance if he knowingly has in his possession an alcoholic beverage, except that he does not commit the offense when in the course of his employment it is necessary to possess alcoholic beverages.

(2) A person convicted of the offense of possession of an intoxicating substance shall be fined not to exceed $50 or be imprisoned in the county jail for any term not to exceed 10 days, or both. If proceedings are held in the youth court, the preceding penalty does not apply, and the offender shall be treated as an alleged youth in need of supervision as defined in 41-5-103(13). In such case, the youth court may enter its judgment under 41-5-523.

History: En. 94-5-610 by Sec. 1, Ch. 513, L. 1973; amd. Sec. 1, Ch. 87, L. 1974; amd. Sec. 1, Ch. 536, L. 1977; R.C.M. 1947, 94-5-610; amd. Sec. 3, Ref. 74, app. Nov. 7, 1978.

Cross-References

Adult rights, Art. II, sec. 14, Mont. Const.

Unlawful purchase of alcoholic beverage, 16-3-301.

Definition of "intoxicating substance", 45-2-101(30).

Definition of "knowingly", 45-2-101(33).

DRIVERS' LICENSES

Miscellaneous Provisions

61-5-302. Unlawful use of license. It is a misdemeanor for any person to:

(1) display or cause or permit to be displayed or have in his possession any canceled, revoked, suspended, fictitious, or altered operator's or chauffeur's license;

(2) lend his operator's or chauffeur's license to any other person or knowingly permit its use by another;

(3) display or represent as one's own any operator's or chauffeur's license not issued to him;

(4) fail or refuse to surrender to the division upon its lawful demand any operator's or chauffeur's license which has been suspended, revoked, or canceled;

(5) use a false or fictitious name in any application for an operator's or chauffeur's license or knowingly make a false statement or knowingly conceal a material fact or otherwise commit a fraud in any such application; or

(6) permit any unlawful use of an operator's or chauffeur's license issued to him.

History: En. Sec. 37, Ch. 267, L. 1947; amd. Sec. 1, Ch. 70, L. 1961; R.C.M. 1947, 31-153; amd. Sec. 58, Ch. 421, L. 1979.

Cross-References

Kinds of fraud, 28-2-404.

What constitutes actual fraud, 28-2-405.

What constitutes constructive fraud, 28-2-406.

Classification of offenses, 45-1-201.

"Misdemeanor" defined, 45-2-101.

Unsworn falsification to authorities, 45-7-203.

Misdemeanor — no penalty specified, 46-18-212.

46-18-212. When no penalty is specified. The court, in imposing sentence upon an offender convicted of an offense for which no penalty is otherwise provided or if the offense is designated a misdemeanor and no penalty is otherwise provided, may sentence the offender to a term of imprisonment not to exceed 6 months in the county jail or a fine not to exceed $500, or both.

History: En. 95-2206.3 by Sec. 31, Ch. 513, L. 1973; R.C.M. 1947, 95-2206.3(part).

Cross-References

Classification of offenses, 45-1-201.

Definition of misdemeanor, 45-2-101.

Violation of Montana Elder Abuse Prevention Act misdemeanor, 53-5-525.

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